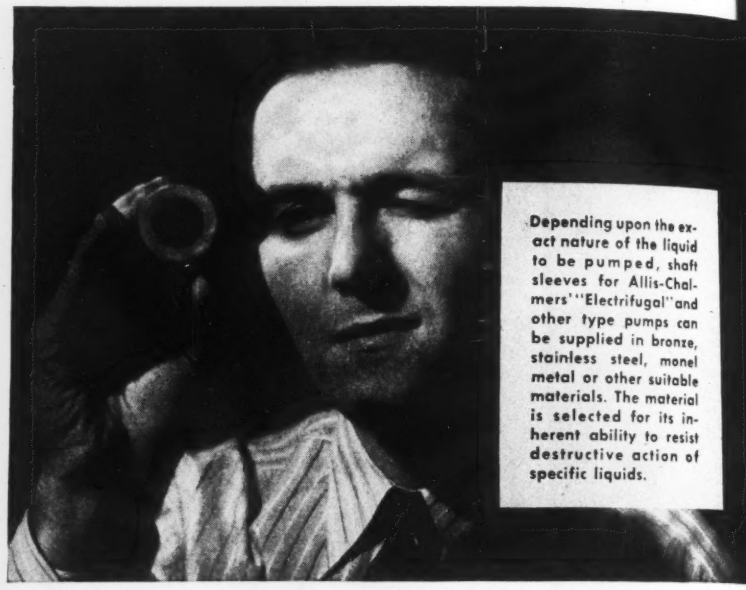
ENGINEERING NEWS-RECORD

ck-mounted hydraulic boom facilitates erection of an M-2 treadway bridge in Belgium.

UNIV OF MICHIGAN
GENERAL LIBRARY
ANN ARBOR MICH

[PUMP TIPS FROM ALLIS-CHALMERS—ONE IN A SERIES]

How to make SLEEVES Last Longer . . .



Depending upon the exact nature of the liquid to be pumped, shaft sleeves for Allis-Chalmers' "Electrifugal" and other type pumps can be supplied in bronze, stainless steel, monel metal or other suitable materials. The material is selected for its inherent ability to resist destructive action of specific liquids.

AS WITH MANY pump troubles, excessive sleeve wear is apt to trace back to misalignment of pump and motor. For when shaft is deflected, sleeve is apt to wobble within the packing — accelerating friction and wear.

So serious is this problem of misalignment, that Allis-Chalmers engineers were led to develop, for many applications, the famous "Electrifugal" pump — in which both the motor and pump impeller are mounted on one shaft and in one frame.

In such a pump the elements cannot get out of line — and danger of excessive sleeve wear is minimized. However, many pumps in use today are separate from their driving motors — and the coupling flanges must be carefully aligned . . . and *kept* in alignment!

Here are other ways to extend sleeve life:

▶ Don't draw stuffing box gland too tightly . . . excessive pressure will wear shaft sleeves unduly.

▶ Never pump a liquid for which your pump was not designed. Sleeves are able to withstand corrosive effects of some but not necessarily all liquids. When in doubt over safety of changing pump application, check with your manufacturer.

▶ Generally a thin stream of liquid being pumped serves as a water seal between packing and sleeve. If it is dirty or abrasive, a separate supply of sealing liquid should be obtained. And it should reach the sleeve in a steady supply. Be careful water seal piping isn't plugged — or lantern ring displaced.

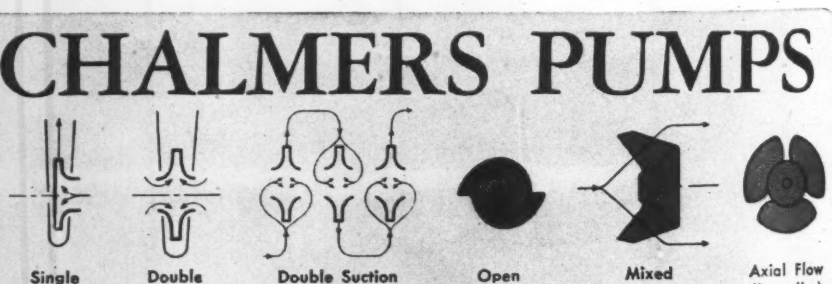
▶ Send for your *free* copy of Allis-Chalmers' "Handbook for Wartime Care of Centrifugal pumps". This valuable booklet applies to *all* makes of pumps. ALLIS-CHALMERS MFG. CO., MILWAUKEE 1, WIS.

♪ *Tune in the Boston Symphony, Blue Network, every Sat. Eve.*

A 1708

ALLIS-CHALMERS PUMPS

Allis-Chalmers builds all types and variations of pumps shown at right. Capacities from 10 to 150,000 gpm—heads to 2500 lbs.



The Week In Engineering and Construction

GINEERING NEWS-RECORD • FEBRUARY 15, 1945 • VOLUME 134 • NUMBER 7

Timed public work proposed to stabilize construction

National Planning Association sees need for large public works program after the war but would control it to check labor shortages or increases in construction cost

Greater centralization of control over eral public works and closer integra- of state and federal construction proposed by the National Planning sociation in order to have the con- uction industry play its full part in lancing the national economy. The sociation is a non-profit, non-political ganization established in 1934 to make anning studies in agriculture, busi- ss, labor and government. Its study the place of the construction industry the national economy was made by iles L. Colean, former technical di- ctor of the Federal Housing Admin- tration.

High construction volume

An annual volume of new construction f $15.4 billion in the first postwar ecade is estimated by Mr. Colean to e necessary to the $140 billion national ncome that is generally considered to e required for postwar full employ- ment. All construction, including main- enance, is set at $21 billion. The high- st volume of new construction before he war was $11 billion in 1926.

One of the important steps in bal- ancing the national economy at full em- ployment levels, says the association, will be stabilization of the construction industry. Ths cannot be done by public work alone, but such work can play an important part in stabilizing the in- dustry.

In any consideration of stabilization, Mr. Colean asserts, "public works are a potential source of balance. However, in the past, lack of advance planning and appropriate timing have often caused public construction to *increase* rather than moderate the violence of the construction cycle". To this end, the association makes the following recom- mendations:

1. The federal agencies concerned with construction be authorized and provided with appropriations for planning and acquiring sites for public works in advance of determining the time for their construction, so that a backlog of planned public works may be maintained ready for contract, to supplement private construction as conditions may warrant.

2. The policy of making loans to states and local government, as provided in the War Mobilization and Reconversion Act of 1944, be continued as a means of encouraging coordination of local and federal public works programs.

3. A federal Public Works Control Authority be established to determine the timing of all federal construction and to cooperate with the states.

4. Such federal and local public works as are now definitely planned, or as may be speedily prepared for contract, be undertaken at the earliest date consistent with the prosecution of the war, but that preparation be made to taper off operations in case of later labor shortages and cost increases which may result from an over-rapid expansion of private construction.

(*Continued on page 6*)

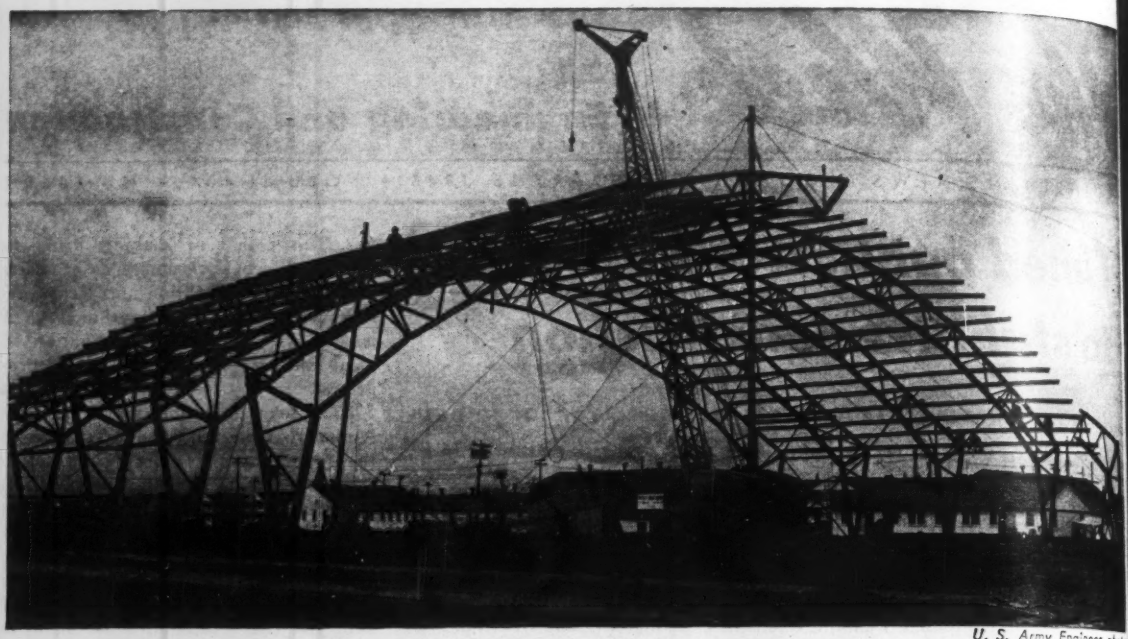
Acme photo

Special war equipment speeds bridge erection

Engineers of the U. S. First Army are shown here using a truck-mounted, hydraulically controlled boom to facilitate rapid construction of an M-2 treadway bridge across a small stream at Houffalize, Belgium. This town, located in the center of the recent Ardennes pocket, was the point where on Jan. 16 the First and Third U. S. Armies re-established contact.

The treadways are 42½ in. wide, formed of steel channels pin-connected at the joints to make rigid spans. The deck consists of steel grating, and the units are capable of supporting any vehicle up to 45 tons.

The truck-mounted boom is 14 ft. long and hinged at its base. Swinging from its traveling position along the outside of the truck body, it picks up the treadways and positions them. The use of this truck equipment and the treadways for ponton bridge construction was described in Engineering News-Record, *April 13, 1944, vol. p. 518.*



U. S. Army Engineer photo

Three-hinged arched truss for airplane hangar of lightweight cold-pressed steel

Now in process of erection near Sacramento, Calif., is an airplane hangar of light section steel, 179 ft. 5 in. wide by 200 ft. long, with two 21-ft. 6 in. steel lean-tos on either side, one being two stories in height and the other one story. The hangar itself is a three-hinged arched truss, 167 ft. 6 in. c. to c. of two bottom pins, tied together horizontally just below the floor level by 3-in. deep flats that serve as tierods. Spaced about 25 ft. apart, the arches have a rise of 53 ft. 8 in., providing a clear height at the center of approximately 46 ft. 6 in., and at the sides of 15 ft. 8 in.

Designed to permit easy dismantling and reassembly, the structure is composed of cold-pressed steel shapes of high tensile steel, possessing excellent weldability and readily formed into the required shape. Chords are formed of two C shapes, 7 to 14 gage in thickness, that are separated by and bolted together with batten plates. The nuts on these bolts are drawn up so tight by means of pneumatic power wrenches as to increase very greatly the strength of the connection through the frictional bearing developed and thereby cause the two main members of the chord to act as a unit. Web members are channel shapes that fit between the chords. Purlins are made from Z-shapes designed as continuous members that splice between trusses and bolt to the upper side of the top chord. All field connections are bolted.

Trewhitt, Shields & Fisher are the general contractors for the hangar at Mather Field. Steel was fabricated by the Stran-Steel Division of the Great Lakes Steel Corporation. Plans and specifications were prepared by and work done under the supervision of the U. S. Engineer Office, Sacramento, Calif.

Penna. orders 200 cities to plan sewage works

Implementing its previously expressed intention to curtail stream pollution in Pennslyvania, the Sanitary Water Board of the state department of health has now notified more than 200 municipalities to prepare and submit for approval plans for sewage treatment works. A list of the communities has been made available, and supplementary lists will be issued as further action is taken to abate stream pollution in the state.

Issuance of these orders is the outcome of ten hearings held by the Sanitary Water Board last summer in various parts of the state. Invitations to attend the meetings were extended to municipalities, industries and other interested parties, who were informed of the Board's intention to undertake a state-wide program of stream pollution control.

From information obtained at the hearings the Board compiled the list of places where remedial measures must be undertaken. The first list, containing some 200 municipalities, was recently released by Dr. A. H. Stewart, secretary of health and chairman of the Sanitary Water Board.

Copies of this and supplementary lists to be issued may be obtained from Dr. Stewart's office in Harrisburg.

San Diego votes April 17 on new water pipeline

A resolution to place a $6,000,000 bond issue to finance pipelines from San Vicente reservoir to San Diego, Calif., on the April 17 city general election ballot was reached recently by San Diego officials.

New facilities, including five pipelines, a water treatment plant and a regulating storage reservoir, had been recommended to the city council as a means of most advantageously using 50,000,000 mgd. of Colorado River water to be delivered to the city by an aqueduct authorized by the federal government (*ENR*, Jan. 4, vol. p. 3).

ENGINEERING NEWS-RECORD. Published every Thursday. **Return postage guaranteed.** Vol. 134, No. 7. Price 25c per copy. Allow at least ten days for change of address. All communications about subscriptions should be addressed to the Director of Circulation, 99-129 N. Broadway, Albany, 1, N. Y., or 330 W. 42nd Street, New York 18, N. Y. Subscriptions, United States, U. S. Possessions and Latin American Republics. $5.00 for one year, $8.00 for two years, $10.00 for three years. Canada $6.00 for one year, $10.00 for two years, $12.00 for three years. Great Britain and British Possessions 60 shillings for one year, 120 shillings for three years. All other countries, $10.00 for one year, $20.00 for three years. Please indicate position and company connection on all subscription orders. Entered as second-class matter October 29, 1936, at the Post Office at Albany, N. Y., under the Act of March 3, 1879. Printed in the U.S.A. Cable Address: "McGrawhill New York". Member A.B.P. Member A.B.C. Copyright 1945 by McGraw-Hill Publishing Company, Inc., James H. McGraw, Founder and Honorary Chairman; James H. McGraw, Jr., President; Howard Ehrlich, Executive Vice-President for Business Operations; John Abbink, Executive Vice-President for Editorial Operations; Curtis W. McGraw, Treasurer; Joseph A. Gerardi, Secretary; J. E. Blackburn, Jr., Circulation Manager. **Publication office: 99-129 North Broadway, Albany 1, N. Y. Editorial and Executive Offices 330 West 42nd St., New York 18.** District Managers and Branch Offices: Fred G. Hudson, 520 N. Michigan Ave., Chicago 11; 738-9 Oliver Building, Pittsburgh; J. W. Otterson, 68 Post St., San Francisco, 4; Aldwych House, Aldwych, London, W. C. 2, England; Washington: J. M. Spackman, New York; A. B. Cozzens, Philadelphia; E. E. Duff, Jr., Cleveland; B. F. Horn, Detroit and Chicago; W. G. Payne, St. Louis; R. N. Phelan, Los Angeles; J. I. Ballard, Boston; Ralph Maultsby, Atlanta, Ga.

urplus construction equipment sale o be held at Kearney, Neb.

fficials of the Office of Surplus Property, Treasury Department, dispose of 825 items of used construction machinery Feb. 21-22

lans are now being completed by Office of Surplus Property of the Treasury Department for the pub- ale of a large variety of used con- ction equipment and farm tools Kearney, Neb., Feb. 21 and 22. struction machinery to be sold in- es: 85 tractors, 76 graders, 83 pers, 35 concrete mixers, 8 shovels, snow plows, 29 material spreaders, material buckets, 47 compressors, cranes, 140 pumps and 10 pavers. ddition, 125 pieces of farm equip- t will be sold.

wo previous sales, one at Kearney December and one at Salina, Kan., anuary were conducted as regional al" sales to develop the most satis- ory method of disposing of equip- t of the type listed above. The lts with the methods followed were sidered highly satisfactory and the now planned is being given wide licity. It will be conducted five es east of Kearney and the units be sold will be available for in- ction Feb. 19 and 20. Thos. C. phens, Kansas City regional director the Treasury Department's procure- nt division assisted by specialized. ernment-trained Treasury employees. l conduct the sale.

Only bids from dealers

Qualified bidders will consist of deal- and distributors of equipment of type being sold. General contrac- s will not be able to qualify as bid- s, as the plan is to dispose of the terial through normal trade chan- s. However, a contractor may ac- mpany a dealer to the sale and ough this man purchase the unit ired. The markup in price per- tted by dealers in such cases is con- lled by regulations of the Office of ce Administration.

Sales will be made by "on-the-spot- " methods. Under this procedure, ich officials wish to point out is not auction sale, each bidder will regis- and receive a badge to show that has qualified. He will then be given circular containing the number and brief description of each machine. xt, following the inspection period, bidders will assemble in a build- on the grounds to permit the sale be conducted indoors.

Bids will be requested on a single m basis and as listed in the circular eviously mentioned. As each item is announced for sale by a Treasury representative, the bidders will turn in cards showing the amount bid, firm name, and article being sold. Awards will be made immediately to the highest bidder, and the successful bidder and the sale price will be announced. Officials in charge may reject any bids considered too low.

At the conclusion of each day of the sale, the buyers are expected to sign purchase contracts, make their payments and arrange for shipping instructions.

It is to be noted that all payments will be for the total cost of the item. Payment may be made as cash, cashier check, certified personal check, or money order made payable to the Treasurer of the United States.

Rapid sales possible

The Washington office of E. P. Phillips, who heads the construction machinery and farm equipment section of the Surplus Property Division, reports that the method outlined resulted in rapid turnover at previous sales. For example, at the recent sale at Salina, 1,150 people representing 282 firms from 32 different states purchased the surplus equipment at the rate of 88 pieces of equipment per hour for ten hours. The total sale was $329,209, and of the 880 items offered for bids 769 items were sold, the other being withdrawn because of bids considered too low, due to an insufficient number of bids, or other reasons. Equally rapid disposal resulted at the December sale at Kearney.

Other sales to be held

The sale now planned for Kearney is the only one definitely scheduled for the near future. However, a large sale is tentatively scheduled by the Denver office the last week in February. This sale will probably be held in Utah.

Additional sales are expected in the near future as the Office of Surplus Property will dispose of equipment considered surplus by all federal government departments, including the U. S. Navy, the War Department, and the Federal Works Agency.

Organizations wanting to obtain data on future sales should contact one of the twelve regional offices of the Treasury Department's procurement division. These offices are located as follows: Region 1—Park Square Building, Boston, Mass.; Region 2—350-5th Ave., Empire State Building, New York, N. Y.; Region 3—499 Pennsylvania Ave. N. W., Washington, D. C.; Region 4—Commercial Arts Building, 704 Race St., Cincinnati, Ohio; Region 5—209 La Salle St., Chicago, Ill.; Region 6—Belle Isle Building, Atlanta, Ga.; Region 7—609 Neil P. Anderson Building, Fort Worth, Tex.; Region 8—2605 Walnut St., Kansas City, Mo.; Region 9—7th Floor, Exchange Building, 1030 15th St., Denver, Colo.; Region 10—30 Van Ness Ave., San Francisco, Calif.; Region 11—2005 Fifth Ave., Seattle, Wash.; Region 12—Nunoz Rivera Park, San Juan, Puerto Rico.

Still more information may be obtained by being placed on the mailing list for sale announcements and for copies of the *Surplus Reporter*, which is published four times a month, with the last issue devoted to construction equipment and farm machinery. To receive the material just mentioned, requests should be addressed to one of the regional offices listed above.

• • •

Rock weir to raise level of Colorado River

Construction of a rock weir on the Colorado River near Blythe, Calif., to raise the normal level of the river about 2½ ft. is underway by the Bureau of Reclamation to insure water for the Palo Verde Irrigation District.

Following completion of Boulder and Parker dams, the muddy lower Colorado cleared but began to scour its channel at a rate of about one foot a year threatening irrigation intakes.

The rock weir, being constructed at a point where the river is 750 ft. wide and 5 to 17 ft. deep, is expected to guarantee a permanent flow of water through a new intake.

• • •

Fontana steel plant will operate postwar

Kaiser interests expect to continue after the war the manufacture of steel at the Fontana plant in California and is considering an additional investment of $37,000,000. Kaiser is also considering the advisability of making a proposal for the purchase of the steel plant at Geneva, Utah.

This was Henry Kaiser's answer to an offer of the U. S. Steel Corp. to the Defense Plant Corporation for the purchase of the Kaiser Co.-owned Fontana plant. Mr. Kaiser says that funds are available to repay the currently required portion of Reconstruction Finance Corp. loans and that Fontana is not and will not be for sale.

Chicago makes large filter equipment award

Awarding of a $942,738 lump sum contract on Feb. 7 by the Commissioner of Public Works, Chicago, Ill., covering the installation of filter equipment at that city's South District Filtration Plant marks the final step towards complete filtration of drinking water for more than 1,000,000 south side residents. This is the 44th contract let to date for construction of the plant and appurtenances. The entire project is nearly 75 percent complete. Installation of the underdrains and rapid sand filters which was begun last summer (*ENR*, June 29, 1944, vol. p. 921) is about two-thirds finished.

The present contract was awarded to the Pitt Construction Co., Pittsburgh, Pa. It covers the installation of all filter equipment piping; the surface, backwash and filter effluent systems complete with meters and controllers; the master control and operating table tops; and other miscellaneous equipment necessary for operating the filtration equipment. Robert Gordon, Chicago contractor, submitted the second low bid of $988,100.

WPB approval has been obtained for materials and equipment required and an AA3 priority has been granted for the work. Although completion of the filter equipment installation is scheduled for early next year, other construction is being expedited to permit partial operation of the plant some time this spring, according to W. W. DeBerard, city engineer.

• • •

Underground water supply studied by Louisville

The Louisville Water Co. is making a study to determine if water supply of Louisville, Ky., could be obtained from the Ohio River through underground infiltration.

It has also authorized taking of bids on approximately $1,000,000 worth of new construction and equipment, including new coagulation basins, mechanical chemical-handling facilities, and water-softening processes.

The underground supply system originally had been proposed as a substitute for a new construction program. It had been argued that lack of turbidity in the underground supply would obviate necessity for the increased coagulation—one of the major reasons for building new basins.

However, it is probable that the basins will have to be built anyway, since the company is committed to a policy of softening Louisville's water.

A. N. Carter takes over ENR Washington post

Archie N. Carter, associate editor of *Engineering News-Record*, has been transferred to the Washington office of the McGraw-Hill Publishing Co. Mr. Carter's new assignment is to expand this journal's news gathering service in the nation's capital, and in addition to act as regional editor with responsibility for reporting on technical developments in Delaware, Maryland, Virginia, West Virginia and North Carolina. His office is in the National Press Building.

The addition of a full-time technical editor in Washington is designed to broaden *Engineering News-Record's* coverage in this area, as well as to maintain closer contact with sources of news relating to both domestic and foreign matters. Mr. Carter will also act as Washington representative for *Construction Methods*.

Six years on ENR staff

Mr. Carter, who has been on the *News-Record* editorial staff for six years, is a 1935 Iowa University graduate in civil engineering. Following an engagement at the U. S. Engineer district office in Rock Island, he went to Liberia, Africa, in 1937 to spend two years as a construction engineer on the Firestone rubber plantation. When he returned to the United States, he became news editor of *Engineering News-Record*, and since January, 1942, he has been serving as an assistant editor. He is quite active in the American Society of Civil Engineers and has served as secretary and as president of the Junior Branch of the Metropolitan Section.

Included among Mr. Carter's assignments in almost every field of civil engineering and construction reporting was a visit to Central America in 1943, where he wrote an account of the Inter-American highway project.

Stuyvesant Town plans filed in New York

When plans were filed last week for Stuyvesant Town (*ENR* April 29, 1943, vol. p. 649) with the Department of Housing and Buildings in New York City, the country's largest postwar housing development thus far scheduled approached closer to reality. Forty-one buildings will be constructed at an estimated cost of about $26,462,000 on a 67-acre site in midtown Manhattan at the East River.

The plans were placed on record by the Stuyvesant Town Corp., an urban redevelopment company formed by the Metropolitan Life Insurance Co., also owners of the great Parkchester housing project in The Bronx.

Clearing of the site is expected to begin on April 1, and the area is to be emptied of present tenants by Aug. 1. Actual construction will not begin, however, until WPB makes materials available.

Stuyvesant Town will house about 8,000 families, or 24,000 persons, in 35 fireproof apartment buildings that will be 12 and 13 stories high, except for 10-story wings on the outside rim of the development. Estimated to cost about $25,030,000, these units will occupy only one-fourth of the site. At an estimated cost of $1,432,000 six-one-story structures will be built to garage about 3,000 automobiles. Eight of the apartment buildings will contain stores.

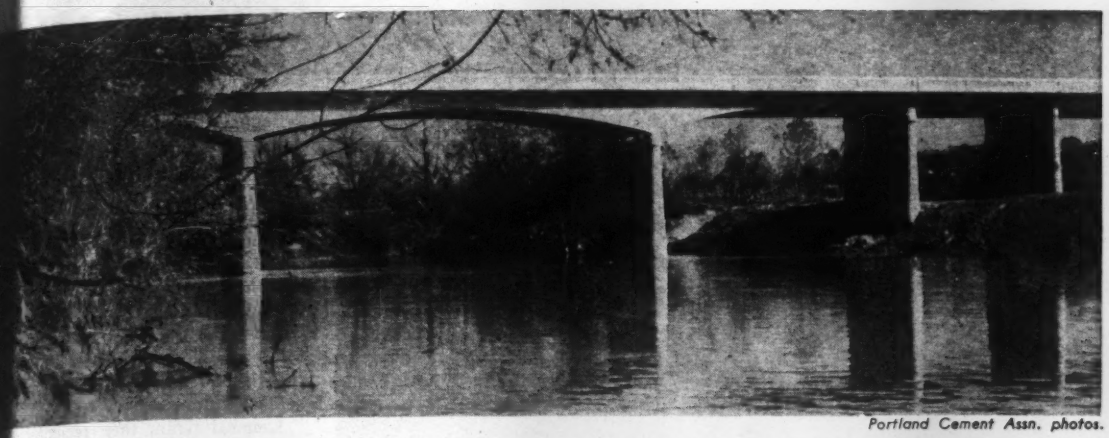
Nearly two-thirds of the site, therefore, is left open to provide for 8 playgrounds, a 3-acre, centrally located park, landscaping, gardens, shaded walks. There will be a service roadway around the entire project.

• • •

Alaska Highway film is now available

A new movie film in color and sound entitled "Highway to Alaska," produced by the Tractor Division, Allis-Chalmers Mfg. Co., is now available to interested organizations without charge. The film is non-technical, but part of it is devoted to construction of the highway. It is mostly made up of scenes along the Alcan Highway, the Richardson Highway and the Glenn Highway, showing the beauties of Northwest Canada and Alaska. The famed Matanuska Valley agricultural district is also featured.

The film is available only in 16 mm. with sound track, not suited to silent projectors. It may be obtained from the Tractor Division, Allis-Chalmers Mfg. Co., West Allis, Wis.



Portland Cement Assn. photos.

Georgia bridge is of 3-span continuous concrete girder construction over main channel and T-girder approach spans.

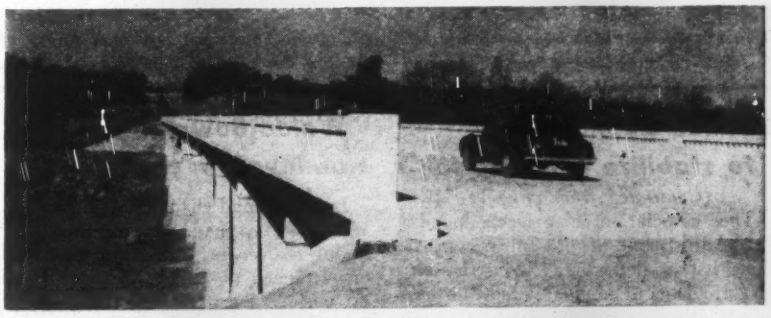
Long Continuous Concrete Girders On Chattahoochee River Span in Georgia

orgia's longest reinforced concrete nuous girder bridge was recently pleted over the Chattahoochee r near Atlanta. The structure is ed on a new access highway par- ing existing U. S. Route 41 which, is point, is carried across the river eans of an old truss bridge rapidly ing obsolescence.

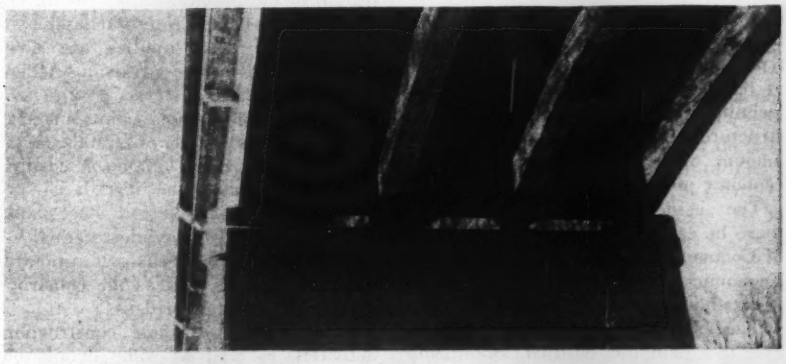
nly the main river spans of the new cture are of the continuous girder , the central span being 90 ft. in th and two end spans each 65 Approaches are simple T-girder rete spans, six on each side of the river spans, making a total length 01 ft. Due to the critical shortage eel at the time plans were formu- d, the bridge was designed in rein- ed concrete using long-span con- ous girders. Spans of similar type, of shorter length, have been con- cted previously in other sections of state.

he Chattahoochee crossing is de- ed for an H-20 loading. The road- is 26 ft. between curbs with a 6-ft. sidewalk cantilevered from one . There are four main girders spaced ft. 2 in. on centers, the width of er stems being 21 in. The deck slab ¾ in. thick, and the soffit of the er is parabolic in shape with depths ing from 3 ft. 7 in. at the center to at the interior supports, including thickness of the deck slab. The ers are supported freely on con- e piers and are fixed against sliding ne interior pier.

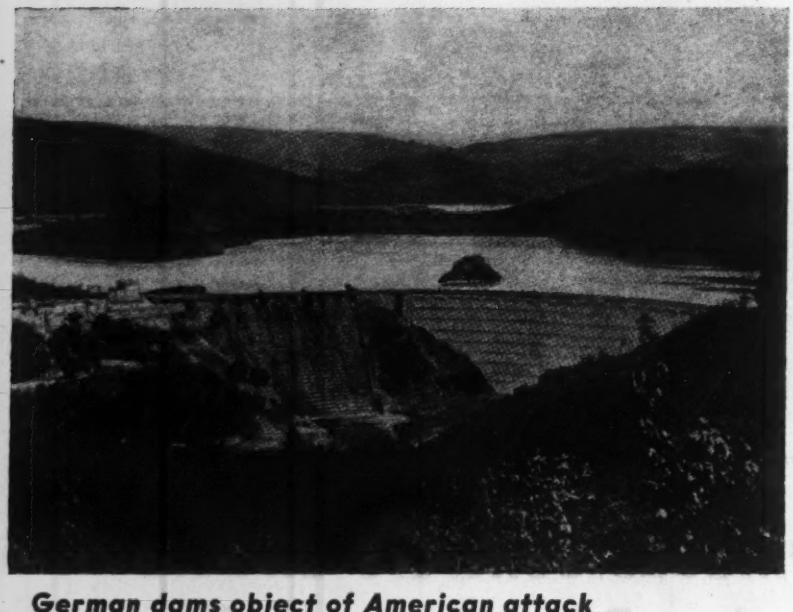
he structure was designed by the Bridge Department of the Georgia State Highway Department under the supervision of C. N. Crocker, bridge engineer, and under the general direction of M. L. Shadburn, former state highway engineer. Contract for the bridge was awarded to G. L. Strickler, of Austell, Ga., at $201,466.



The bridge provides a 26-ft. roadway supported on four lines of girders, each 21 in. wide.



Underside of bridge deck showing section of continuous reinforced concrete arch girders. Note how shoes under outer girders are concealed for architectural continuity.



German dams object of American attack

Five German dams in the Roer River valley east of Aachen were the object of attack by American forces last week. Until these dams were under control of our forces the valleys below them could not safely be occupied as destruction of the dams by the Germans would flood wide areas in the lower valleys.

The battle has ended with the Germans blowing up the control house and gates at the south side of the Schwammenauel Dam. A few days previously a conduit leading northeast from the Urft Dam just downstream had been broken by aerial bombs. Consequently, the Roer had risen sharply, but it has already receded.

Here shown is the Urft Dam on the Urft River, a tributary of the Roer above Dueren. It is of stone masonry construction, 190 ft. high and 740 ft. long at the crest. The usable storage is stated to be 45,500,000 cubic meters. Reports from American headquarters in France put the total storage of the five dams at 165,000,000 cubic meters.

Timed public work to stabilize construction

(*Continued from page* 1)

The association also recommends: (a) Adjustment of present tax provisions that are deterrents to construction; (b) provision of adequate credit for new construction and maintenance through expansion of the loan facilities of the Reconstruction Finance Corp.; (c) the regulation of land subdivision by local governments as a means for influencing the timing of construction as well as the type and cost of building; (d) removal of barriers to the introduction of new techniques; and (e) removal of obsolete structures that place a limit on the amount of new construction that the economy might absorb.

The association recommends that there be established in the Department of Commerce a Bureau of Construction Economics, to publish regularly a series of data adequate to serve as a barometer.

The association's findings are available in a pamphlet entitled "Stabilizing the Construction Industry", National Planning Association, 800 21st St., N.W., Washington 6, D. C., 25c.

Waldo Bowman reports on invasion engineering

In his second dispatch from abroad, Waldo G. Bowman, editor of *Engineering News-Record,* and war correspondent attached to the U. S. Army in the European Theater, reveals that "a mingling of inspiration, pride and sadness attends one's first view of the Normandy invasion beaches." Paying tribute to the heroic sacrifices of those who made possible the initial landings, he describes how supplies are now being handled for the advancing Allied armies.

Movement of supplies, points out Mr. Bowman, calls for the best talents of the Army Engineers. Rain-soaked dirt roads necessitated the installation of timber as well as pierced steel-plank surfacing, and railway destruction by the Germans required the restoration of many bridges, as well as the construction of entirely new bridges.

A description of these construction activities, as well as some details on port rehabilitation, will be featured in Mr. Bowman's report to be published in the Feb. 22 issue.

Federal plan commission urged by General Grant

A suggestion that Congress create a national planning commission to co-ordinate the planning activities of various government agencies was made recently by Maj. Gen. U. S. Grant, 3d, chairman of the National Park and Planning Commission.

Speaking at the annual luncheon meeting of the American Institute of Planning in New York City, General Grant said that the weakness of the former National Resources Board was that it had only executive department representation.

General Grant then recommended a planning body to be composed of members representing Congress, all federal agencies engaged in planning, the Departments of Interior and Agriculture and qualified civilians.

Cleveland Rodgers, of the New York City Planning Commission, also urged the establishment of such a national planning body, but he recommended that it be set up under the National Academy of Sciences so that it would be free from politics and divorced from policy-making and administration.

• • •

Chicago Plan Commission gets new chief planner

Carl L. Gardner has been appointed chief city planner in charge of the master plan division for the Chicago Plan Commission, it is announced by H. Everet Kincaid, executive director. Until recently Mr. Gardner was in charge of all land planning for the Federal Housing Administration, and has resigned to take this new post.

A graduate of the University of Washington and a post-graduate student of the School of Planning at Harvard, Mr. Gardner has had extensive experience in city planning in addition to his six years with FHA. He has served the National Park Service, the Farm Security Administration and the Rural Resettlement Administration. Earlier in his career he worked on the technical staff of Robert Moses, commissioner of parks, New York City, in the designing and construction of the Long Island Parkways, and with the late Thomas Adams who directed the New York Regional Plan.

War achievements cited by Moreell in presenting Moles awards

Frank Crowe, dam builder, honored with William V. McMenimen of Pacific Contractors for achievements in heavy construction

The battle of Midway was the turning point in the Pacific war and victory was made possible by planes operating from a base built on Midway by Pacific Naval Air Base Contractors. Said Vice Admiral Ben Moreell, chief of the Bureau of Yards and Docks in presenting the Moles member award for outstanding achievement in heavy construction to William V. McMenimen of Raymond Concrete Pile Co. and chairman of the executive committee of the eight companies making up the Pacific Naval Air Base Contractors who built the great naval bases in the Pacific area.

The award, a commemorative plaque and scroll, was made at a dinner on Feb. 7, attended by 700 construction men.

Actual work under McMenimen, Admiral Moreell said, extended from California to Cavite and Samoa with construction on many islands scattered over a million square miles of the Pacific. His construction included gigantic fireproof fuel storage tanks that were carved in the interior of a mountain, the construction of a radio station with antennas strung between mountain peaks on an almost inaccessible part of the Andes and seaplane as well as landplane facilities at many points.

In concluding the presentation, Admiral Moreell, himself an honorary member of the Moles and recipient of the award in 1943, characterized McMenimen as a worthy representative of the great construction fraternity that has contributed so much of its energies, mental and physical, to the successful accomplishment of war aims.

In accepting the award, Mr. McMenimen commented at length on the prospect for full construction employment and the possibilities of foreign work for construction firms. A digest of these remarks will appear in an early issue.

Presentation of the non-member award of the Moles was made to Frank Crowe by Carl L. Swenson, vice president of Foley Bros., Inc. Swenson told something of the nineteen dams Crowe had built—650 ft. high Boulder, the world's highest; Parker, the world's deepest, with its foundations 250 ft. below streambed; and 6,500,000 cu. yd. Shasta, the largest single concrete job ever let in one contract. Each dam has been characterized by some outstanding construction feature such as the gigantic cableway system at Shasta with a central head tower 460 ft. high and seven separate cableways to tailtowers made movable to permit reaching every part of the 3,500 ft. long structure.

Mr. Crowe passed on to his personal following of construction men much of the credit for his achievements, commenting that some of the men had been with him for thirty years. This organization has remained a separate entity moving from job to job with the "boss" but for many years never being out of work for more than six months. Promotions usually are made from within this group and very nearly all have remained loyal despite the inroads of shipbuilding and other industries on construction organizations in general.

Pictured at the Moles award dinner on Feb. 7 in New York are, left to right: Jack Macdonald of the Walsh-Kaiser Co., Inc., winner of the member award in 1941; William V. McMenimen, to whom the member award was made this year, Arthur A. Johnson, president of the Moles and recipient of the member award in 1944; and Frank Crowe who received the non-member award for 1945.

• • •

Hal G. Sours enters highway equipment field

Hal G. Sours, former state highway director of Ohio and past president of the American Road Builders Association, has formed a partnership with Eugene E. Baldwin of Taylor & Baldwin, Columbus, Ohio, to handle highway materials and equipment.

Mr. Sours has been in highway work in Ohio for the past 24 years, having started as maintenance superintendent in Summit County in 1919 following his discharge from the Army. He was named assistant director and chief engineer of the Ohio Highway Department in 1939, and in 1940 was named director when Robert S. Beightler went into military service.

For a brief period in 1937-38 Mr. Sours was with the Truscon Steel Co. as promotion engineer for highway products. He served as president of the A.R.B.A. in 1940-41, and is a vice-president of the American Association of State Highway Officials.

• • •

Canadian engineers extend cooperation

A cooperative agreement between the Engineering Institute of Canada and the Corporation of Professional Engineers of Quebec was signed recently. Under this agreement the Engineering Institute will automatically admit to membership engineers who have been licensed to practice in Quebec by the association, which is the licensing body for the province. No entrance fee is required by the institute from members of the provincial association who apply under this cooperative arrangement, and dues for the two organizations are to be collected by the association.

The Quebec Association is the fifth provincial association to set up such a cooperative arrangement with the Engineering Institute of Canada under a plan inaugurated in 1938 (*ENR*, Dec. 1, 1938, vol. p. 689). Ontario, which has the largest membership, and British Columbia, have not yet entered into the arrangement.

News of the Engineering Schools

Roy L. Williamson has been appointed executive secretary of the North Carolina State College Foundation, Inc., the purpose of which is to promote, by financial assistance and otherwise, education and research in the various schools of the college, including that for engineering. Part of the funds of the foundation will be used to increase salaries in order to obtain highly trained men for the faculty, and to carry on research.

Mr. Williamson, who is also custodian of the physical property and equipment of the college, recently severed his connection with the city of Raleigh, N. C., after more than 19 years' service as city engineer, director of utilities and commissioner of public works. He holds a civil engineering degree from N. C. State College, and also received postgraduate training, including a course in sanitary engineering.

Included in the plans of Temple University, Philadelphia, Pa., for a $15,000,000 postwar development program, just announced by President Robert L. Johnson, are an engineering school with laboratories and research facilities.

Because of the urgent need for additional buildings and equipment arising from increased enrollment, a second unit of the University of Southern California College of Engineering, Los Angeles, Calif., is being considered, according to an announcement by President Rufus B. von KleinSmid. A campaign to raise $150,000 for the new unit also was announced. The present unit, built five years ago to accommodate 300 students, has been filled to capacity with night and day classes. Wartime demands have increased the enrollment to 750 daytime students and 2,200 in evening hours.

P. M. Cook, honor graduate of 1940 in civil engineering at the University of British Columbia, Vancouver, B. C., has been appointed to the British Columbia Industrial Scientific Council as research engineer to carry out scientific investigations on highway construction in the province. These investigations have been undertaken to assist in the development of the postwar programs of highway building now being planned. The work is being carried out at the university in cooperation with the Department of Public Works.

Work on what, it is said, will be the most accurate map ever made of Mexico has been started by the Geographic Institute of the National University of Mexico with the cooperation of the ministries of agriculture and national defense. The work is being directed by Senorita Rita Lopez de Llerge, one of Mexico's best map makers and mathematicians, who is chief of the Institute.

The Indiana Stream Pollution Control Board has asked the state general assembly to enact legislation to require every water works and sewage plant operator to have a license certifying his ability to operate such a plant, and to require all operators to attend an operator's school at Purdue University at least every other year at the expense of their employers.

Prof. Armond Circe, director of studies at l'Ecole Polytechnique, Montreal, Que., has retired because of ill health, and has been succeeded by Pierre Beaudry. Mr. Circe was a member of the faculty for 20 years, and has been made an honorary director of the school. He is a graduate of l'Ecole Polytechnique and of the Imperial College of Engineers in London, and was a postgraduate student at l'Ecole des Ponts et Chaussees in Paris.

Mr. Beaudry is also a graduate of l'Ecole Polytechnique and of the Massachusetts Institute of Technology.

Louis Bourgoin has been named assistant director. He has been a professor at l'Ecole Polytechnique for 30 years. Henry Gaudefroy will continue as executive secretary.

• • •

L. S. Jeffords promoted by Atlantic Coast Line

L. S. Jeffords of Wilmington, N. C., chief of personnel of the Atlantic Coast Line Railroad and its affiliate, the Charleston and Western Carolina, has been named chief engineer, succeeding W. W. Mayre, who has been named general manager of the A. C. L. affiliate, effective Feb. 1. W. S. Baker, of Augusta, Ga., general superintendent of the Charleston and Western Carolina since Sept. 1, 1944, has been appointed to succeed Jeffords as chief of personnel.

Jeffords joined the Atlantic Coast Line engineering department in March, 1910, serving in various capacities until June, 1921, when he was transferred to the Charleston and Western Carolina as engineer of maintenance of way. Later, he served as superintendent and general superintendent until Sept. 1, 1944, when he was appointed chief of personnel of the Atlantic Coast Line with headquarters at Wilmington.

• • •

Chicago Groundhogs hold fifth annual meeting

The Chicago Groundhog Club held its fifth annual meeting at a dinner Feb. 3, at which the new officers for the coming year were installed. Adam Trapp, secretary of the Chicago Board of Underground Work was elected president, and Walter Faget, assistant chief engineer, Sanitary District of Chicago, was named vice-president.

Honorary guests at the dinner included Mayor Edward J. Kelly, Wm. H. Trinkhaus, chief engineer of the Sanitary District, Phillip Harrington, commissioner of subways and superhighways, and J. B. Jackson, in charge of construction for the Commonwealth Edison Co.

• • •

Extensive construction projects in Mexico

The Mexican senate has approved plans of President Avila Camacho, which call for expenditure of $52,000,000 of federal funds for roads, electrification and general public improvements throughout the republic, starting this year. Several bond issues will be floated to pay for the projects.

The federal district, consisting mainly of the City of Mexico, will spend $10,000,000 this year on public improvements, mostly for streets and highways, parks, drainage and sewerage, water and electricity.

A new cement manufacturing plant is to be erected at Leon at a cost of $2,500,000. The owners are Cementos Portland Del Bajio, Jose Rivera president. It is backed mostly by Mexican capital. The plant will be the largest in Mexico. Priorities have been obtained for necessary materials. Plans were drawn by E. S. Tillotson, engineer in chief, who hopes to have the factory ready for production this year.

MEN AT WORK

In California

M. RAWN, chief engineer and general manager of the Los Angeles County Sanitation ricts has carried on his broad shoulders many additional responsibilities during the war od. Not the least of these has been his duties as a consultant to the Army on sewage osal installations, as president of the Federation of Sewage Works Associations, and as irector of the Am. Soc. C. E. and chairman of that society's committee on collective gaining.

EORGE PRACY, superintendent of distribution, San Francisco Water Department, bends y down to get a reading on one of the city's master meters.

C. E. CHANDLER, assistant to bridge division engineer of the Los Angeles municipal engineering department, who is one of the active planners associated with the city's postwar parkway system.

eep reflection is personified by ED REINCKE (center), assistant state sanitary engineer of California, who is flanked on the left by CHARLES GILMAN HYDE, professor emeritus of sanitary engineering, University of California, and on the right by CARL M. HOSKINSON, hief engineer and acting director of Sacramento's water and sewage department. Right: Talking over postwar equipment developments are FRED KLAUS, city engineer of Sacramento, Calif., and FRED NELSON, assistant manager of the Dorr Co., Inc., sanitary division.

MEETINGS

Regional and Local

ONTARIO GOOD ROADS ASSOCIATION, annual convention, Royal York Hotel, Toronto, Canada, Feb. 28-March 1.

MISSOURI VALLEY CONFERENCE OF STATE HIGHWAY DEPARTMENTS, Palmer House, Chicago, March 1-3.

INDIANA SECTION, AMERICAN WATER WORKS ASSOCIATION, Lafayette, Ind., March 15-16 (tentative).

NORTH WEST GOOD ROADS ASSOCIATION OF MINNESOTA, annual meeting Nicollet Hotel, Minneapolis, Minn., March 16.

SOUTHEASTERN SECTION, AMERICAN WATER WORKS ASSOCIATION, Jefferson Davis Hotel, Montgomery, Ala., March 19-21.

Cancellation

MINNESOTA FEDERATION OF ENGINEERING SOCIETES, 1945 war conference, Minneapolis, Feb. 22-24.

AMERICAN ZINC INSTITUTE, GALVANIZERS COMMITTEE, spring meeting, New York City.

MINNESOTA SECTION, AMERICAN WATER WORKS ASSOCIATION, Minneapolis, Minn., March 9-10.

ILLINOIS SECTION, AMERICAN WATER WORKS ASSOCIATION, Chicago, Ill., March 12-13.

CANADIAN SECTION, AMERICAN WATER WORKS ASSOCIATION, Royal York Hotel, Toronto, Canada, March 19-21.

OHIO SECTION, AMERICAN WATER WORKS ASSOCIATION, Columbus, April 5-6.

• • •

New sanitary district for Los Angeles County

To provide modern sewage facilities to cost about $1,473,000 for residents of a 21-sq. mi. area in San Gabriel Valley, Los Angeles County, Calif., a new county sanitation district has been formed by the Board of Supervisors. According to A. M. Rawn, chief county sanitation engineer, the district will make use of a $750,000 trunk sewer outlet built by the federal government for the former Army Camp at Santa Anita.

Stevens and Co. of New Orleans have been granted a two-year lease to dredge shells out of the gulf from the Alabama line to Cape San Blas near Apalachicola, Fla. W. L. Stevens, president of the company, hopes to develop a market for the shell for road building.

The dredging operations will be carried out under the supervision of the State Board of Conservation.

Ventilation system for Brooklyn Battery Tunnel

The New York City Tunnel Authority has announced the approval of an agreement between the city and the Authority for locating part of the Brooklyn Battery Tunnel ventilation system underground in Battery Park.

Fans for supplying fresh air to the Manhattan end of the tunnel, with necessary machinery, will be housed in an 86-ft. high building to be constructed on the north side of Battery Place just south of the tunnel portal. In addition, exhaust fans for maintaining the circulation of fresh air through the tunnel will be located out of sight beneath Battery Park in an underground vault over the tunnel's twin tubes.

This type of ventilation design, developed by the Authority, is a new feature of tunnel design, according to Commissioner William H. Friedman. It contrasts with earlier methods of combining exhaust and fresh air pumping systems in a single building, as used in the Holland, Lincoln and Queens Midtown Tunnels.

Because of its 9117-ft. length from portal to portal, additional ventilation facilities will be located in New York Bay just north of the tip of Governor's Island and also near the tunnel's Brooklyn plaza.

JOBS OF THE WEEK

EXPERIMENTAL PLANT, Inyokern, Calif.

Bureau of Yards & Docks, Navy Department, Washington, D. C., awarded a contract for an experimental plant at Navy Ordnance Test Station to Haddock Engineers, Ltd., San Francisco, Calif. The estimated cost is $5,000,000.

TIRE MANUFACTURING PLANT, Gadsden, Ala.

Goodyear Tire & Rubber Co., Akron, Ohio, awarded a contract to A. K. Adams Co., Atlanta, Ga., for additions to tire manufacturing plant. The estimated cost is $1,000,000. Defense Plant Corp. will help finance. Robert & Co., Atlanta, Ga., are the engineers and architects.

ALTERING ORDNANCE BUILDINGS, St. Louis, Mo.

U. S. Engineers, St. Louis, Mo., awarded a contract for structural changes in a group of buildings at the St. Louis Ordnance Plant to Fruco Contruction Co., St. Louis at $1,285,000.

HOSPITAL, Dearborn, Mich.

Veterans Administration, Washington, D. C., will construct additional hospital buildings at the Veterans Hospital to cost $3,000,947. The contract has been awarded to F. H. McGraw & Co., Hartford, Conn.

TRUCK TIRE MANUFACTURING PLANT, Houston, Tex.

Brown & Root, Inc., Houston, has been awarded a contract by the Kelly-Springfield Tire Co., Houston, for a plant to manufacture truck tires. The estimated cost is $6,150,000.

ORDNANCE PLANT ADDITION, Paducah, Ky.

War Department, Washington, D. C., awarded a contract for an addition to an ordnance plant to Rust Engineering Co., Pittsburgh, Pa. The estimated cost is $1,000,000.

ORDNANCE PLANT ADDITION, Weldon Springs, Mo.

Rust Engineering Co., Pittsburgh, Pa., has been awarded a contract for an ordnance plant addition, by the War Department, Washington, D. C. The estimated cost is $1,000,000.

TIRE MANUFACTURING PLANT, Pottstown, Pa.

Firestone Tire & Rubber Co., Akron, Ohio, will alter a plant to manufacture tires. The estimated cost with equipment is $7,000,000. Defense Plant Corp. will finance. Giffels & Vallet, Inc., Detroit, Mich., is the engineer. L. Rossetti, Detroit, is the architect.

INFIRMARY BUILDING, Lexington, Ky.

R. P. Farnsworth & Co., New Orleans, La., was the lowest bidder for construction of an infirmary building at the Veterans Hospital for Veterans Administration, Washington, D. C. at $1,382,500.

Note—Additional bidding and contract news on many projects large and small appear in the Construction News section beginning on page 13.

Construction Communiques

ENGINEERING NEWS FROM THE BATTLEFRONTS

. I. Road Builders Lauded—A p of engineers and assistants with U. S. 7th Army in Alsace, were ding a road only a few hundred s from German held positions, re- s Thoburn Wiant, correspondent of Associated Press. Suddenly a jeep ing a two-star plate pulled up be- them. Out stepped an officer, who, ensing with salutes, asked the men ather around.

I just want to tell you I think your is as important as that being done the men with the guns," he said. e men over there making all that e are helpless unless ammunition supplies roll over this road you're lding."

Whereupon, Maj. Gen. Edward H. oks of Concord, N. H., command- the army corps, crawled back into jeep and drove off to another part the front.

Clearing French fields of mines— st deadly reminders of the German upation of French soil are the thou- ds of mine fields and booby traps t behind in fields, gardens, farm ds, homes, deserted buildings—any- ere Allied soldiers were expected to ss.

U. S. Army Engineers, under Major neral C. R. Moore, Chief Engineer the European Theater of Operations, dertook the training of French civil- ns who volunteered for the work of ne removal.

Typical of what has been achieved by this U. S.-French cooperation is in the Le Havre area. Here two soldiers, teamed with 28 patriotic Frenchmen, were responsible for removal and de-activation of more than 1,200 mines and booby-traps.

Top expert of this group is Technical Sergeant William G. Lockwood, Paducah, Ky., of an Engineer general service regiment. The sergeant, working through an interpreter, gave the Frenchmen their basic training in explosives. Next came actual field demonstrations in methods of locating, deactivating and removing mines and booby traps.

In the field, Sgt. Lockwood works closely with his civilian team, checking each mine layout, where possible, against captured German maps. Simultaneously throughout France, other teams of expert U. S. Engineers and French volunteers are ridding the country of the mine belt.

Florida Limestone Tests Help Army Engineers—Similarity of deposits of limerock in Florida to that found in the Southwest Pacific Islands has enabled the U. S. Army Engineers there to proceed with road and airport building and repairs with greater speed.

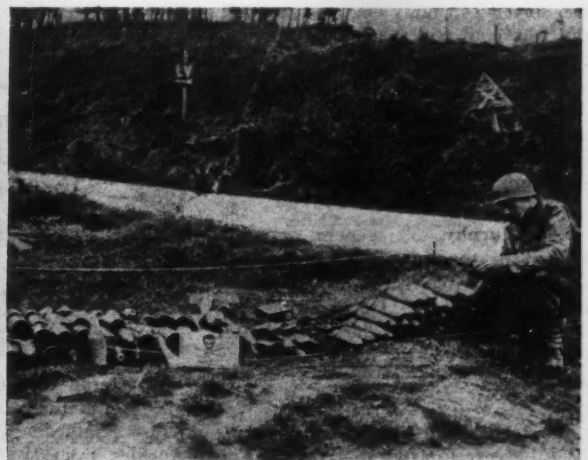
Recently, the Chief of Engineers called on Col. A. B. Jones to make tests of the Florida limerock and coral material. Ocala limerock was used and the tests were made by the Testing Laboratory of the U. S. Engineer Department, Jacksonville District Office. The design and construction methods of coral pavements in the Southwest Pacific were governed by the data revealed by these tests.

The problem of determining which types of coral are best suited to road and airport building (*ENR*, July 13, vol. p. 26) is narrowed down to a matter of analyzing suitable samples of each deposit after determining which deposit may be worked most easily and profitably with the equipment at hand.

American Engineers Help Repair London — General Eisenhower has placed 3,000 U. S. engineers at the disposal of the British government to help in the repair of London. According to the Ministry of Works, 70,000 damaged houses require repairs at a cost of $157,000,000.

Reconditioning French Railroads— French railways, operated by the Military Railway Service of the Transportation Corps of the U. S. Army, are carrying more than 10,000 tons of military freight daily. Five major French rail lines and three single-track lines have been reconditioned by the United States Army Engineers after systematic wrecking by Allied bombers. U. S. Army Engineers have rehabilitated a total of 7,000 miles of railroads for use of the Allied Armies. The French estimate that 60 percent of their rolling stock was destroyed. At a single marshalling yard now in use by the U. S. Army is the charred and rusting junk of 1,300 locomotives and freight cars.

It is reported that the Crystal Palace, London, the glass-domed auditorium destroyed by fire several years ago, is to be restored at a cost of $4,500,000.



Official U. S. Army photos.

Tech. Sgt. William G. Lockwood, of Paducah, Ky., a U. S. Engineer group instructor for French civilians in the work of de-activation and removal of mines and booby traps, checks mine locations with a French volunteer. Right, Pfc. Calvin L. Cox, of Greenwood, Mass., is seen examining the igniter of a bottle mine. Also visible in the heap of mines are French 75 MM shells rigged by the Germans for mining.

OBITUARY

Seth M. Van Loan, 72, chief engineer of Philadelphia's $18,000,000 water rehabilitation program and former chief of the city water bureau, died Feb. 7. Mr. Van Loan was employed by the federal government in the geological and geodetic divisions before he went to Philadelphia. In 1896 he was engaged by the State of New York on the Erie and Barge Canal survey, design and construction. Mr. Van Loan went to Philadelphia from New York in 1901 and was an assistant engineer on plans for a municipal water filtration system.

James W. Hyde, 79, former inspector in the engineering department of the Bureau of Public Works, Rochester, N. Y., died Feb. 4.

James L. Cresap, a former chief engineer of the Florida State Road Department, died Jan. 30 in Tallahassee.

Albert H. Addison, 65, for 34 years a well-known Florida engineer, died Jan. 27 in Arcadia, Fla.

D. Leslie Diehl, 63, president and treasurer of Whittaker and Diehl Engineering Co., Harrisburg, Pa., died at his home near Chambersburg on Feb. 5. He was recenutly elected to honorary life membership in the American Society of Civil Engineers.

Melville Auerbach, 68, assistant city engineer, Oakland, Calif., died Feb. 5. A city employee since 1893, Auerbach also served as county engineer in 1899, and was active in local civic and engineering circles.

James Mutch, acting county engineer of Spokane County, Washington, died Feb. 2. He had been in the county engineer's office since 1928.

Leo Murphy, 53, general superintendent of the Seaboard Construction Co., Mount Kisco, N. Y., died in Pottsville, Pa., Feb. 10. He superintended the construction of the Westchester County Airport in the Rye Lake section of Harrison, N. Y.

Lewis E. Myers, 82, founder of the L. E. Myers Construction Co. of Chicago, died in that city Feb. 5. He was born in Pittsburgh and started his utility career with the Edison Electric Co. of Pittsburgh in 1886. In 1890 he went to Chicago to head the Chicago office of the Detroit Electric Works and shortly afterwards organized his construction company, builders and operators of public utilities.

Abraham K. Fleschner, 57, former president of the Albert A. Volk Co., New York City excavating and demolition firm, died in New York on Feb. 11. Mr. Fleschner was a graduate of Cooper Union and was with the Volk concern for 29 years, the last five as president, resigning last March, when he and his brother, Charles, organized Fleschner Brothers. The Volk firm, under Mr. Fleschner's guidance, demolished the New York World's Fair Buildings and the Ninth and Second Avenues elevated railroad structures.

William F. Day, 86, former assistant city engineer, Detroit, Mich., died Feb. 2. A city employee for 50 years until his retirement in 1933, Mr. Day was engineer in charge of sewer construction.

George F. Haislmaier, 61, field supervisor of sewers, who was with the sewer department of the city of Milwaukee for the past 23 years, died Feb. 5.

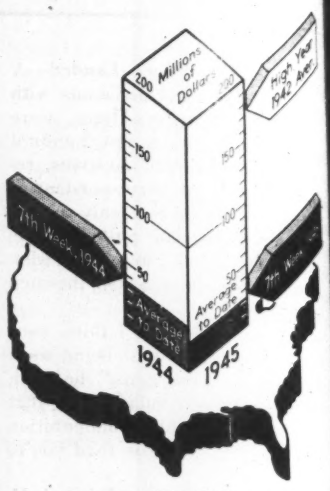
• • •

E. S. McCandliss dies Army Engineer, Denver

Edgar Scott McCandliss, 60, chief of the Denver office of the United States Army Engineers Civil Works Division, died Feb. 8 in Los Angeles, Calif.

A veteran of the First World War, Mr. McCandliss was in charge of the Army Engineers district office in Los Angeles from 1937 to 1940 and later served at Honolulu and Denver. He also was a former associate professor of civil engineering at the Missouri School of Mines.

CONSTRUCTION ACTIVITY



As Reported This Week to... *Engineering News-Record*

CONTRACT VOLUME

Continental U. S. Only
(Thousands of Dollars)

	Week of Feb. 15 1945	Cumulative 1945 (7 wk.)	Cumulative 1944 (7 wk.)
Federal	$38,845	$108,533	$189,424
State & Municipal	1,943	21,421	12,539
Total Public	$40,788	$129,954	$201,963
Total Private	3,120	51,454	50,372
U. S. Total	**$43,908**	**$181,408**	**$252,335**

WHERE CONSTRUCTION ACTIVITY ORIGINATED THIS WEEK

Dollar Volume (Thousands)

Type of Work	This Week	Cumulative 1945 (7 wk.)	Cumulative 1944 (7 wk.)
Waterworks	$1,351	$5,991	$3,577
Sewerage	40	4,161	3,531
Bridges	25	5,043	1,846
Highways	650	9,926	9,656
Earthwork, Waterways	1,766	3,326	4,537
Buildings, Public	33,662	76,115	120,109
Industrial	1,891	32,559	20,022
Commercial	1,098	11,448	27,372
Unclassified	3,425	32,839	61,585

NOTE: Minimum size projects included are: Waterworks and waterways projects, $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings, $150,000.

NEW PRODUCTIVE CAPITAL

	1945 (7 wk.)	Cumulative 1944 (7 wk.)
NON-FEDERAL	$113,556	$64,992
Corporate Securities	5,670	47,176
State and Municipal	107,886	12,241
RFC Loans	.....	5,575
FEDERAL	$77,137	$90,832
Total Capital	**$190,693**	**$155,824**

ENR INDEX NUMBERS

Index Base = 100		1913	1926
Construction Cost	Feb. '45	303.70	145.99
Building Cost	Feb. '45	237.71	128.50
Volume	Jan. '45	63	28

CONSTRUCTION REPORTS

Compiled by Business News Department—Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ELSIE EAVES, Manager *SCOTT McLEOD, Statistics* *J. A. MAHONEY, Reports*

(Daily service also available—Write for details)

WATER SUPPLY

POSED WORK

inn., South International Falls—Village, Lynch, clk., WW sys., involving 16,000 ft. 6 in. pipe, hydrants, etc. $70,000. C. Larson, Detroit Lakes, engr. CD 11/15 NR 11/23.

. J., Rockaway—Rockaway Boro, Municial Bldg., rejected bids Dec. 14, concrete ervoir. $18,000. Will readvertise. A. skie, 10 Washington St., Morristown, gr. CD 12/8.

. Y., Port Washington—Comrs. Port shington Water Dist., 163 Main St., ter supply addn. $75,000. J. Homer nford, 500 Fifth Ave., New York, Zone 18, gr.

O., Cleveland—National Advisory Com. ronautics, F. Hobson, project mgr., Cleveand Airport, preparing plans water storage in and pumphouse. $52,000.

†Tenn., Memphis—Yards & Docks, Navy t., 18 St. and Constitution Ave. N.W., ash. 25, D. C., engineer-architect services, Marion L. Crist & Associates, Union Life dg., Little Rock, Ark., water supply nprvs., Naval Air Technical Training Cenr and Naval Air Station.

Tex., Baytown—Dr. H. B. Marshall, pres. arris Co. W.C. Imprvt. Dist. 7, Baytown, ted bonds to purchase, imprv. water and werage sys. $296,000. J. J. Rady, Insurce Bldg., Fort Worth, engrs.

Tex., Dallas—Vickery Fresh Water Imprvt. st. (to be organized) c/o H. D. Hall, Hillrest Rd. School, waterworks. Over $20,000.

Tex., Menard—City, Q. R. Sanders, mayor, ity Hall, rejected bids Dec. 15, 1 m. g. elevated steel water tank. Will readvertise. . B. Gieb & Assoc., 1207 Texas Bank Bldg., allas, engrs. CD 12/1—ENR 12/7.

Tex., West—City, City Hall, developing eep test water supply well, $25,000.

Puerto Rico, Caguas—Municipality, plans nprv. waterwork. $63,000.

Man., Killarney—Municipality, WW sys. 50,000. T. H. Porter, Portage La Prairie, ngr.

Ont., London—Westminster Twp. Council, . F. Gerry, reeve, 379 Talbot St., London, atermains to supply village of Byron. 25,000. F. Bell, Court House, St. Thomas, ngr.

Ont., Preston—Water-Light Comn., W. E. uartz, mgr., water sys. exten. $100,000.

Que., Bolschatel—Municipality, plans preared WW sys. $80,000. Z. Langlais, 105 Mountain Hill, Quebec City, engr.

Que., Causapscal—Municipality, plans prepared WW sys. $75,000. Z. Langlais, 105 Mountain Hill, Quebec City, engr. CD 1/30.

Que., Notre-Dame du Lac—Municipality, plans WW sys. $35,000. Z. Langlais, 105 Mountain Hill, Quebec City, engr.

Que., Shawinigan Falls—City, J. A. Bilodeau, mayor, 2 story, 70x115 ft., rein.-con., brick filtration plant addn., Dessaules St., also 4 filter beds. $130,000. E. A. Delisle, c/o owner, engr.

BIDS ASKED

Bids Asked February 20

†Ind., East Chicago—Dpt. of Waterworks, City Hall, filter plant imprvs., Ind. 12-142-N. **FWA.** $30,000. Plans deposit $10. Russell B. Moore Co., 1456 N. Delaware St., Indianapolis, engr.

Bids Asked February 23

Mont., Fairfield—Town, Town Hall, Mrs. E. G. Hughes, clk., water supply sys., with well, pumphouse, 2 pumps, 20,700 ft., 4- to 8-in. mains, 25 gate valves, 22 hydrants, elevated steel tank. $75,000. Plans deposit $25. Corwin & Co., Medical Arts Bldg., Great Falls, consult. engrs. CD 1/31—ENR 2/8.

Tex., Tyler—City, J. P. Ferrill, acting city mgr., gravel wall type water well, deep well turbine pump and motor.

Will Probably Take Bids in April

Ore., Medford—City, City Hall, rein.-con. reservoir. $50,000. Cunningham & Associates, Spalding Bldg., Portland, engrs. CD 12/14—ENR 12/21.

Bids Asked April 17

★**Calif., Napa**—City, City Hall, constructing Conn Valley Dam, 30,500 ft. reservoir containing water shed of some 55 sq. miles. $625,000. Tentative date. A. Kempkey, Balboa Bldg., San Francisco, engr.

Symbols and Abbreviations Include:

†	Federal Government
★	Project of $500,000 or over
ENR	**Engineering News-Record**
CD	**Engineering New-Record Construction Daily**

Projects—By Size

Construction projects here reported cover the United States and Canada, are of these minimum sizes or larger: water supply, earthwork, waterworks, $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings, $150,000.

Classes of Construction

(Name in order of Listing)

Water Supply
Sewers, Waste Disposal
Bridges
Streets & Roads
Earthwork, Waterways
Latin America
Public Buildings
Commercial Buildings
Industrial Buildings
Unclassified

Stages Reported

PROPOSED: (except Streets & Roads): BIDS ASKED (new announcements only. For full calendar, see also preceding issues of ENR);

LOW BIDDERS: On jobs below $500,000 value all low bidder news will be the final reports published on the projects involved except where award is not made to the low bidder. In this case, a supplementary contract award report will be published.

CONTRACTS AWARDED: Except awards to low bidders previously reported in low bidder stage.

Dates shown are of issue in which last previous report was published.

LOW BIDDERS

La., Hahnville—St. Charles Parish School Bd., Hahnville, water supply and purification sys. for Hahnville School, from McDonough Constr. Co., Algiers, New Orleans. **$37,850.** Shourds, Mogabgab & Bean, Audubon Bldg., New Orleans, archts. CD 1/17—ENR 1/25.

N. Y., Idlewild—Comr. of Marine & Aviation, Pier A, foot of Battery Pl., North River, New York, Zone 4, Feb. 8, water supply sys. for Municipal Airport, Contr. 2427, from A. Federico & Co., 461 Avenue X, Brooklyn, Zone 23, over **$64,000.** CD 1/31.

Tex., Houston—City, M. H. Westerman, secy., City Hall, Jan. 31, 30 in. c.i. transmission main in Calumet St. from Caroline to Hutchins Sts. and in Hutchins St. from Caroline to Rosedale Sts., from Thos. Bate & Sons, 1107 Girard St., **$86,648.** Est. $80,000.

CONTRACTS AWARDED

†Calif., Burbank—City, City Hall, installing 26,000 lin. ft. 6- to 24-in. c. i. pipe, appurtenances, Calif. 4-504-N, to Underground Constr. Co., 75 and San Leandro Sts., Oakland, **$61,006. FWA.** Bids 1/17. CD 1/25—ENR 2/1, under LB.

★**Ill., Chicago**—City, O. E. Hewitt, comr. P. Wks., City Hall, filter equipment C-2, South District Filtration Plant, Lake Front east of South Shore Dr. and north of E. 79 St., to Pitt Constr. Co., Inc., 1235 Washington Blvd., Pittsburgh, Pa. **$942,738.** Bids 12/18. CD 12/20—ENR 12/28 under LB.

Miss., Pascagoula—City, City Hall, 200,000 gal. elevated water tank for water supply, to Chicago Bridge & Iron Works, 1500 N. 50 St., Birmingham, Ala. **$30,000.**

Tex., Corpus Christi—City, City Hall, pump. unit for Calallen Station, to San Antonio Machine & Supply Co., Corpus Christi, **$30,-047.** Myers & Noyes, 320 Nixon Bldg., engrs.

†Tex., Weslaco—City, water treatment plant, Tex. 41-688-N, Contr. 5, to M. Darby, Pharr, **$15,000. FWA.** Bids 1/19. CD 1/8.

†Va., Portsmouth—City Council, approx. 12,000 ft. 24 in. c.i. water supply line from Lake Cahoon to Lake Kilby filtration plant, at Suffolk, Va. 44-396 to Calnaught Constr. Co., 328 Detroit St. **$144,040. FWA.** CD 10/3—ENR 10/5.

SEWERS, WASTE DISPOSAL

PROPOSED WORK

Calif., Ojai—City, City Hall, approved bond election, sewage treatment plant, $40,-000.

Calif., San Diego — Consolidated-Vultee Aircraft Co., 4205 Pacific Coast Highway, revising sewerage sys. and installing connection with city interceptor sys. $26,000.

†Calif., Vallejo—City and Solano Co., Vallejo, Chestnut St. outfall sewer, **$347,800. FWA.** C. E. Bentley, 216 Pine St., San Francisco, engr.

Minn., Cambridge—City, S. R. Bronniche, clk., sewage treatment plant. Over $25,000. R. D. Thomas & Associates, 1200 2 Ave. S., Minneapolis, engrs.

Mo., Lebanon—City, City Hall, sewage disposal plant, $25,000-$30,000. Applied for FWA funds. Burns & McDonnell, 107 W. Linwood Blvd., Kansas City, consult. engrs.

†Tex., Legion—Veterans Admin., 1 Vermont Ave. between H and I Sts. N.W., Wash. 25, D. C., sanitary sewer and water facilities replacement, imprvs., at hospital, $55,000.

Wash., Yakima—City, City Hall, sewer and domestic water sys. in Hillcrest Addn. $35,000.

Ont., Markham — Toronto & York Rd. Comn., 57 Adelaide St., Toronto, storm sewer. $42,400. H. Rose, c/o owner, engr.

Ont., Timagami — Temiskaming & Northern Ontario Ry. Comn., S. B. Clement, ch. engr., North Bay, sanitation works. $50,-000.

Que., Bolschatel—Municipality, plans prepared sewerage sys. $90,000. Z. Langlais, 105 Mountain Hill, Quebec City, engr.

Que., Price—Municipality, J. A. Lamieux, secy., installing sewerage sys. $75,000.

BIDS ASKED

Bids Asked March 2

Calif., Hayward—Oro Loma Sanitary Distr. 21845 Foothill Blvd., vitr. sewers in Ashland area. Plans deposit $10. L. Cedrick Macabee, 156 University Ave., Palo Alto, engr. CD 11/2—ENR 11/9.

Bids Asked March 13

Me., Bath—Dpt. P. Wks., City Hall, two 25 ton incinerators. $60,000.

Bids Asked in Spring

★**N. J., Fairlawn**—Boro Clerk, Municipal Bldg., sewerage sys. $1,600,000. T. F. Bowe, 110 William St., New York 7, N. Y., engr. CD 9/26—ENR 9/28.

LOW BIDDERS

Ill., Chicago—Sanitary Dist. of Chicago, 910 S. Michigan Ave., Feb. 1, reconditioning sewage screens at Calumet Sewage Pump. Station, Contr. 45-11 (CLP-M), from Brady Conveyors Corp., 20 N. Jackson Blvd., **$29,-436.** CD 1/26—ENR 2/1.

BRIDGES

PROPOSED WORK

Ill., Chicago—Cook Co. Hy. Dpt., 160 N. LaSalle St., rejected bids Jan. 8, replacing

BRIDGES, etc. (Proposed Work, Cont'd.)

timber superstructure of one section of viaduct 413 ft. long with steel stringer beams and welded roadway plates, Burnham Ave. viaduct. Will readvertise. G. Quinlan, 160 N. LaSalle St., engr. CD 1/17—ENR 1/25, under LB.

New Jersey—State Hy. Dpt., Trenton, bridge connecting Atlantic City and Brigantine, Atlantic Co. $75,000-$100,000.

Ont., Guelph — Wellington Co. Council, Guelph, plans bridges, repairs. $100,000. A. Keith, County Bldgs., engr.

Que., Laval—Municipality, bridge, in Iles Laval. $35,000.

Que., Salaberry—Municipality, reconstructing bridges on Chausoe St., in Salaberry de Valleyfield.

BIDS ASKED

Bids Asked February 20

Maryland—State Roads Comn., Baltimore, eight 17 ft. span treated timber pile bridge over Pocomoke River on county road at Masseys crossing, Wicomico and Worcester Counties. Plans deposit $5.

Pennsylvania—State Dpt. Hys., Harrisburg, concrete stairway to pedestrian underpass and 0.04 mi. rein.-con. pavement, U. S. Route 230, Lower Swatara Twp., Dauphin Co.; 0.01 mi. concrete deck I-Beam bridge superstructure U. S. Route 309, Wilkes-Barre Twp., Luzerne Co.

Bids Asked February 27

Oklahoma—State Hy. Dpt., Capitol, Oklahoma City, repairing Black Bear Creek Bridge on State Hy. 18, near Pawnee, Pawnee Co., $18,400; Walnut Creek Bridge repairs, addns. on U. S. 77, at Purcell, McClain Co., $4,000; widening overpasses U. S. 66 north and east of Afton, $8,600 and south and west of Miami, Ottawa Co., $11,290; rip rap protection to Highway Bridge on U. S. 66, over Deep Fork Creek at Luther, Oklahoma Co., $6,700; to bridge on U. S. 66, over Deep Fork at Warwick, Lincoln Co., $1,600; new rein.-con. bridge on State Hy. 41, Cordell, Washita Co., $21,500. H. E. Bailey, state hy. engr.

Washington—State Hy. Dpt., Olympia C. Hickey, dir., overcrossing of Elm St. in Kalama, Primary State Hy. 1, Cowlitz Co.; concrete girder and steel girder bridges over Sinks Stream and Satus Creek on Primary State Hy. 8, Klickitat Co.; grading, paving, constructing 4 bridges on 0.826 mi. Secondary State Hy. 1-A, Blaine to Lawrence School and Deming to Acme, Watcom Co. Plans deposit $2.

Bids Asked February 28

Louisiana—State Hy. Dpt., Baton Rouge, 0.301 mi. Tangipahoa River Bridge reconstruction, incl. grading, surfacing approaches, etc., State Route 408, S.P. 415-03-05, in Independence, Tangipahoa Parish. Plans deposit $3 without cross section sheets, $3.50 with cross section sheets.

La., Empire—Plaquemine Parish Police Jury, through F. K. Cummins, pres., Court House, Point-a-la-Hache, 3 sets boat ways on Doullut's Canal, owner furnishes all creosoted piles and timber, J. C. DeArmas, Jr., Point-a-la-Hache, and 8004 Hickory St., New Orleans, engr.

CONTRACTS AWARDED

Mich., Grosse Ile—Wayne Co. Road Comn., 3800 Barlum Tower, Detroit, concrete slab bridge for highway on Grosse Ile, to Darin & Armstrong, 2041 Fenkell Ave., Detroit. Est. $25,000. CD 12/27—ENR 1/4.

STREETS AND ROADS

BIDS ASKED

Bids Asked February 19

N. Y., Kew Gardens—President Queens Boro, Boro Hall, 120-55 Queens Blvd., Zone 15, asphaltic concrete on concrete repaving, etc. Fairview, Onderdonk and 71 Aves., Madison, and Stephen Sts.; sheet asphalt on new or existing concrete paving 71 (Olmstead Pl.), 49 and 46 Sts., Cooper and 50 Aves.

N. S., Halifax—R. T. Donald, secy. Dpt. Munitions & Supply, Ottawa, Ont., paving roads at Joint Service Magazine. $30,000.

Bids Asked February 20

Ia., Sac City—Bd. Supervs. Sac Co., Sac City, maintenance graveling various secondary roads. Over $25,000. W. C. Otto, Sac City, co. engr.

Bids Asked February 27

Oklahoma—State Hy. Dpt., Capitol, Oklahoma City, grading, drainage, asphalt surfacing 3.908 mi. U. S. 59, northwest of Grove, Delaware Co., $141,000; rock asphalt on gravel surfacing 4.841 mi. State Hy. 18, north from Carter Co. line, Murray Co., $62,000; concrete patching 22.2 mi. U. S. 77, across Carter Co., Ardmore Co., $30,700; 43.7 mi. U. S. Hy. 77, across Garvin Co., Garvin Co., $34,300; concrete pavement State Hy. 19, in Ada, Pontiac Co., $7,200. H. E. Bailey, state hy. engr.

Washington—State Hy. Dpt., Olympia, C. Hickey, dir., grading, surfacing, draining 16.639 mi. Primary State Hy. 12, Deep River to Johnson's Landing and Middle Nemah to Johnson's Landing, Pacific and Wahkiakum Counties; grading, draining, paving 4.124 mi. Primary State Hy. 2, Cle Elum to Easton, Kittitas Co. Plans deposit $2.

Bids Asked February 28

Louisiana—State Dpt. Hy., Baton Rouge, shaping roadway, gravel surfacing, etc. 4.4 mi. S.P. 737-00-10 (Cont. 3), Maneuver Area Roads (Group 5), Sect. 4, State Route 537, Vernon Parish; shaping roadway, repairing concrete pavement, etc., 2.5 mi. S.P. 737-00-23, Maneuver Area Roads (Group 18), on State Route 42, Vernon Parish; repairing concrete pavement, etc., 1.5 mi. S.P. 737-00-24, Maneuver Area Roads (Group 19) on State Route 205, Rapides Parish. Plans deposit $1 each.

LOW BIDDERS

†**Calif., San Diego**—Federal Works Agency, Spreckels Bldg., Jan. 31, asphaltic concrete surfacing approx. 44,000 sq. ft., grading, constructing concrete pipe drains at Kit Carson and Linda Vista Schools, from Daley Corp., 4430 Boundary St., **$53,248.**

Louisiana—State Dpt. Hys., Baton Rouge, Feb. 7, imprv. 1.452 mi. St. John the Baptist Parish, from T. L. James & Co., Inc., Ruston, **$70,410**; 1.573 mi. East Baton Rouge Parish, from W. R. Aldrich & Co., Kalwrah University Gardens, Baton Rouge, **$52,256**; imprv. Caddo Parish, from Gifford-Hill & Co., Inc., Ardis Bldg., Shreveport, **$29,811.** CD 1/31—ENR 2/1.

New York—Dpt. P. Wks., Highway Div., Albany, Feb. 7, imprv. 6.34 mi. Albany Co., from Lane Constr. Co., 35 Colony St., Meriden, Conn. **$156,801.** CD 1/19—ENR 1/25; imprv. 4.24 mi. Greene Co., from Peckham Road Corp., 47 Mamaroneck Ave., White Plains, **$80,527,** CD 2/1; indefinitely postponed bids to have been opened Feb. 7, imprv. 0.9 mi. Nassau Co., CD 1/19—ENR 1/25.

Tex., Carpus Christi—City, A. C. McCaughan, mayor, and J. D. Browning, judge Nueces Co., Jan. 30, paving, drainage facilities, etc., Morgan, Kokernot and Baylor Aves., from Brown & Root, Inc., 501 Musset St., **$75,415.** CD 1/23.

Tex., Corpus Christi—City, A. C. McCaughan, mayor, City Hall, Jan. 30, permanent paving, etc. Ayres St. from east property line of 12 St. to property line of Santa Fe St., from Brown & Root, Inc., 1501 Musset St., **$38,495.** CD 1/23.

CONTRACTS AWARDED

O., Cleveland—E. I. du Pont de Nemours Co., R. N. Loftman, engr. in charge, 2615 Independence Rd., resurfacing with blacktop roadways in plant area, to Loesch & Green Co., 4100 Brookpark Rd., **$27,500.**

Tex., Houston—City, City Hall, asphalt topping 13 streets, force account, **$60,000.** CD 7/10—ENR 7/13.

Ont., Chatham—Kent Co., Chatham, road reconstruction, day labor. **$475,000.** W. D. Colby, Harrison Hall, engr.

Ont., Crowland — Crowland Twp., W. P. Marshall, clk., Crowland, reconstructing roads, day labor. **$60,000** voted.

Ont., Guelph—Wellington Co., Guelph, road construction, day labor. **$36,000.**

Ont., Hamilton—Wentworth Co., Hamilton, reconstructing roads, day labor. **$100,000.** E. F. Barratt, County Bldg., engr.

Ont., Ottawa — Ottawa Suburban Roads Comn., 279 Carling Ave., road work, day labor. **$160,250** voted. D. Gardiner, County Bldg., engr.

EARTHWORK, WATERWAYS

PROPOSED WORK

Nebraska— North Gothenburg PP & Irr. Dist., E. W. Anderson, pres., Gothenburg, irrigating 30,000 acres by constructing 63 mi. canal and construct storage reservoir with 80,000 acre ft. capacity, diverting water from Platte River, vicinity of Gothenburg.

N. B., Maugerville—Province of New Brunswick, Fredericton drainage scheme reclaiming 4,000 acres. $40,000. A. Roberts, c/o owner, engr.

N. B., Sheffield—Province of New Brunswick, Fredericton, drainage scheme. $30,000. A. Roberts, c/o owner, engr.

N. S., Pictou—Pictou Foundry & Machine Co. Ltd., Pictou, sea wall at drydock. $30,000.

BIDS ASKED

Bids Asked February 19

New York—Comr. Marine & Aviation, Pier A, foot of Battery Pl., North River, New York, Zone 4, furnishing, depositing riprap over designated areas between existing cribwalls, foot of 44 Dr. (Nott Ave.) East River, Queens Boro, Contr. 2430. Plans deposit $1.50.

Bids Asked February 21

†**Louisiana**—U. S. Eng., foot of Prytania St., New Orleans, removal, disposal 190,000 cu. yd. material in maintenance dredging of Bayou Dupre, in Violet Canal, Solic. No. 16-047-45-83, St. Bernard Parish.

Bids Asked March 7

N. J., Ocean City—Ocean City, City Hall, stone jetty projects, Morningside Rd., $25,000; North St., $25,000; First St., $25,000; 3 St., $25,000; approach ramps, bulkhead repairs and street repairs, Prof. 1-4, $100,000. Wm. H. Collisson, Jr., City Hall, city engr.

LOW BIDDERS

†**Idaho, Coeur d'Alene**—Bureau Reclamation, Dpt. Interior, Coeur d'Alene, Feb. 1, temporary pump, plant Post Falls Unit, Rathdrum Prairie Project, Spec. 1091, from C. A. Power, E915 Marietta St., Spokane, Wash. **$56,200.** CD 1/3—ENR 1/11.

†**Louisiana**—U.S. Eng., foot of Prytania St., New Orleans, constructing approx. 2,000,000 cu. yd. hydraulic earthwork, Solic. No. 16-047-45-81, from Jahncke Service, Inc., 616 Howard Ave., New Orleans, **$291,270.**

†**Louisiana**—U. S. Eng., foot of Prytania St., New Orleans, Feb. 9, dredging approx. 4,240,000 cu. yd. earthwork on 9 x 100 ft. Vermillion River Project, Solic. No. 16-047-45-79, Vermillion Parish, from Standard Dredging Corp., 1402 Whitney Bldg., New Orleans. **$452,952.** CD 1/22—ENR 1/25.

CONTRACTS AWARDED

†**Ariz., Yuma**—Bureau Reclamation, Yuma, grouting dry rock paving of outlet channel and desilting works at Imperial Dam north of here, Spec. 1794-D, to M. H. Hasler, P. O. Box 387, Santa Ana, Calif., $331,000.

†**Ore., Bend**—Bureau Reclamation, Bend, 10 mi. main canal, north unit, Deschutes Project, 21 to 31 mi. north of here, Spec. 1087, to E. B. Bishop, Orland, Calif., $303,803. Bids 12/28, awarded 2/2. CD 12/5—ENR 12/7.

†**Ore., Bend**—Bureau Reclamation, Bend, 8 mi. lateral canal north unit, Deschutes Project, 29 to 34 mi. north of here, Spec. 1092, to United Const. Co., 1021 8 St. N., Seattle, Wash., **$101,395.** Bids 2/3. CD 1/12—ENR 1/18.

†**S. C., Charleston**—U. S. Eng., 33 Customhouse, maintenance dredging waterway from Winyah Bay to here, Project 38-091-45-8 Neg., to Norfolk Dredging Co., Camposteila Wharf, Norfolk, Va., **$169,092.** Bids 1/27. CD 1/16—ENR 1/18.

†**Tex., Port Lavaca**—U. S. Eng., Avenue P and 25 St., Galveston, dredging approx. 12,000 ft. channel from Pass Cavallo to Port Lavaca, between Gallinipper Reef and Sand Point Reef, Calhoun Co., to Bauer-Smith Dredging Co., Port Lavaca, **$30,369.** Bids 1/19.

LATIN AMERICA

Brazil—Republic of Brazil, Rio de Janiero, plans 400 kilometers electric power line from Paulo Afonso to Recife. Water Power Branch, Dpt. of Agriculture, Rio de Janiero, engr.

Brazil, Avanhandava—Republic of Brazil, Rio de Janeiro, plans power station on Tiete River, comprising two 10,000 kw. generators, $300,000. Water Power Branch, Dpt. Agriculture, Rio de Janeiro, engr.

Brazil, Cubatas—Republic of Brazil, Rio de Janeiro, plans power station exten. increasing capacity to 55,000 kw. $450,000. Water Power Branch, Dpt. Agriculture, Rio de Janeiro, engr.

Brazil, Pocos de Caldas — Republic of Brazil, Rio de Janeiro, plans power development on Pardo and Antas Rivers. $1,000,000. Water Power Branch, Dpt. Agriculture, Rio de Janeiro, engr.

Brazil Ribeiras das Lages—Republic of Brazil, Rio de Janeiro, plans central power station addn. $350,000. Water Power Branch, Dpt. Agriculture, Rio de Janeiro, engr.

Brazil, Rio de Janeiro—Sociedade Quimica Mercier Ltde., Calxi Postal 2992, plans plant addns. $100,000.

Brazil, Rio Doce—Republic of Brazil, Rio de Janeiro, plans power development on Manhuassu River, $500,000 plus. Water Power Branch, Dpt. Agriculture, Rio de Janeiro. engr.

Colombia, Belencito—Instituto de Fomento Industrial, Bogota, plans plant. 8,000,000 pesos.

Mexico, Monterrey—Industrialists of Monterrey, c/o Mexican Petroleum Admin., Mexico City, refinery plant. $4,500,000.

Peru, Arequipa—Republic of Peru, Lima, hospital with workshops. 3,000,000 Soles. Dpt. P. Wks., Lima, engr.

Peru, Callao—Republic of Peru, Lima, 1 story, hospital. 3,000,000 Soles. Dpt. P. Wks., Lima, engr.

Peru, Cuzco—Republic of Peru, Lima, plans hospital. 3,000,000 Soles. Dpt. P. Wks., Lima, engr.

IN AMERICA (Cont'd.)

eru, Iquitos—Republic of Peru, Lima, a hospital. 3,000,000 Soles. Dpt. P. , Lima, engr.

PUBLIC BUILDINGS

OPOSED WORK

†Ala., Tuscumbia—Robbins Tire & Rubber Co., Tuscumbia, plant expansion. prox. $500,000. Defense Plant Corp. will nance.

†Ariz., Litchfield Park—Goodyear Aircraft Corp., Airport, Akron, O., addnl. t bldg. Approx. $500,000. Defense Plant p. will finance.

†Calif., Bakersfield—Pub. Housing Auth., HA, 760 Market St., San Francisco, 100 table family dwelling units, Calif 4986.

†Calif., Oakland—Pacific Rubber & Tire Mfg. Co., 4901 E. 12 St., plant expansion. prox. $1,000,000. Defense Plant Corp. will nance.

†Calif., Palm Springs—Pub. Housing Auth., HA, 760 Market St., San Francisco, 25 unit mily dwellings, Calif. 4985.

†Calif., San Francisco—Pub. Housing uth., NHA, 760 Market St., 2,000 war elling units, San Francisco Bay area.

†Calif., San Francisco—Pub. Housing uth., NHA, 760 Phelan Bldg., 25 unit mily dwellings, San Francisco-North Bay rea, Calif. 4985.

†Calif., San Francisco and North Bay—ub. Housing Auth., NHA, 760 Market St., an Francisco, 200 unit family dwellings, alif. 4983.

†Calif., San Francisco, North Bay and nsecia—Pub. Housing Auth., NHA, 760 arket St., San Francisco, 150 unit portable mily dwellings, Calif. 4984.

†Conn., Newington — Veterans Admin., ermont Ave. between H and I Sts. N.W., ash. 25, D. C., bids soon addnl. bldg. nd imprv. Bldg. 2. $87,000. CD 1/16—NR 1/18.

†D. C., Wash.—U. S. Eng., 1 and Doug as Sts. N.W., Zone 25, Walter Reed Hos ital addn.

†Fla., Ft. Myers—Pub. Housing Auth., HA, Georgia Savings Bank Bldg., Peachtree and Broad Sts., Atlanta 3, Ga. 60 family stop-gap housing, Fla. 8270.

†Ga., Bowdon—Textile Rubber Co., Inc., Bowdon, plant expansion. Approx. $250,000. Defense Plant Corp. will finance.

★**Ill., Chicago**—City Bd. Educ., 228 N. LaSalle St., plans by J. C. Christensen, 228 N. LaSalle St., 2 story, brick, concrete school, 1420 N. Hudson Ave., $305,000; 3 story, brick, concrete, steel Ogden School, $350,000.

†Ill., Chicago—Pub. Housing Auth., NHA, 201 N. Wells St., Zone 6, 500 family dwelling unit housing, Ill. 11235.

★**Ill., Elgin**—State Dpt. Pub. Welfare, State Capitol Bldg., Springfield, diagnostic treatment bldg. $1,250,000; power plant addn., equip., tunnels, piping, etc. $721,600; H-type bldg. with dining room, $340,000; recreational therapy bldg., $355,000; occupational therapy bldg., $200,000; kitchen bldg., $150,000, all foregoing at Elgin State Hospital.

★**Ill., Jacksonville**—State Dpt. Pub. Welfare, State Capitol Bldg., Springfield, diagnostic treatment bldg., $1,200,000; power plant, $1,200,000; two recreational therapy bldgs., $355,000 each; storm sewers in veteran's sect., $75,000, all foregoing at Jacksonville State Hospital.

Ill., Kankakee—State Dpt. Pub. Welfare, State Capitol Bldg., Springfield, women veteran's bldg., Kankakee State Hospital. $375,000.

†Ind., Gary—Pub. Housing Auth., NHA, 201 N. Wells St., Chicago 6, Ill., 100 unit single person dwellings, Ind. 12203.

★**†Ia., Des Moines**—Lake Shore Tire & Rubber Co., E. 24 and Scott Sts., bldg. addns., wings, etc. $775,000. Defense Plant Corp. will finance.

†Ia., Hawarden—City, L. R. Ball, mayor, City Hall, light plant expan., incl. new diesel engine, new switchboard and lesser installations. $100,000. Buell & Winter, 508 Insurance Exchange Bldg., Sioux City, engrs.

†Kan., Fort Riley—U. S. Eng., 10 E. 17 St., Kansas City, Mo., laundry plant. $20,000.

†Kan., Junction City—Pub. Housing Auth., NHA, 1411 Electric Bldg., 7 and Lamar Sts., Fort Worth 2, Tex., 90 unit family housing, Kan. 14149.

★**†Kan., Topeka**—Goodyear Tire & Rubber Co., Hy. 40, plant addns. $4,250,000. Defense Plant Corp. will finance.

†La., Camp Polk—U. S. Eng., Avenue F and 25 St., Galveston, Tex., steam boiler plant. $60,000.

†Mich., Kalamazoo — Fuller Mfg. Co., Transmission Div., Pitcher and Prouty Sts., 100x225 ft., steel frame factory. Defense Plant Corp. will finance. L. C. Kingscott & Assoc., Inc., Kalamazoo, archts.

Minn., Delano—City, c/o Clerk, City Hall, power plant imprvs., bldg. addn., furnish and install 1,200 hp. engine, etc. $40,000. R. D. Thomas & Associates, 1200 2 Ave. S., Minneapolis, engrs.

†Mo., Neosho—Pub. Housing Auth., NHA, 201 N. Wells St., Chicago 6, Ill., 100 unit family dwellings, Mo. 23083.

†N. J., Atlantic City—U. S. Eng., 120 Wall St., New York, Zone 5, N. Y., bids soon altering hotel into hospital. $175,000.

†N. M., Deming—Pub. Housing Auth., NHA, 1411 Electric Bldg., 7 and Lamar Sts., Fort Worth 2, Tex., 25 unit family trailer housing, NM 29187.

†N. M., Eunice—Pub. Housing Auth., NHA, 760 Market St., San Francisco, Calif., 14 family dwelling units, N.M. 29185.

†N. M., Monument—Pub. Housing Auth, NHA, 760 Market St., San Francisco, Calif., 14 family dwelling units, N.M. 29186.

★**†N. Y., Brooklyn**—Rheem Mfg. Co., 570 Lexington Ave., New York, plant. Approx. $5,800,000. Defense Plant Corp. will finance.

†N. Y., Schenectady—U. S. Eng., 120 Wall St., New York, Zone 5, bids soon prefabricated steel shop. $100,000.

†N. Y., Watervliet—Adirondack Foundries & Steel, Inc., Watervliet, addnl. plant bldg. $115,000. Defense Plant Corp. will finance.

†O., Ashtabula—Lake City Malleagle, Inc., J. H. Redhead, pres., 5000 Lakeside Ave., Cleveland, sketches 2 story, brick, steel, service and office bldg. $150,000. Defense Plant Corp. will finance.

†O., Dayton—Dayton Rubber Mfg. Co., 2342 W. Riverview St., plant addns., wings, etc. $400,000. Defense Plant Corp. will finance.

†O., Dayton—Pub. Housing Auth., NHA, 2073 E. 9 St., Cleveland, 15, 250 unit family dwellings, O. 33323; 100 unit family dwellings, O. 33324.

Okla., Lindsay—Town, Town Hall, sketches made municipal electric light and power plant addns., imprvs. $75,000. C. E. Brentz, 1221 N. Penn St., Oklahoma City, engr.

†Ore., Portland—Federal Works Agency, Spalding Bldg., plans by Wolff & Phillips, Pearson Bldg., constructing Creston School. $180,000.

Ore., The Dalles—Port of The Dalles, The Dalles, O. W. Gustafson, mgr., grain elevators, steel, rein.-con. $150,000. E. F. Carter, Metropolitan Bldg., Vancouver, B. C., engr.

Pa., Media—Comrs. Delaware Co., Media, Juvenile Home. $150,000.

S. D., Bryant—City, H. C. Larson, mayor, City Hall, approved $34,000 bond issue, diesel power unit and plant changes.

†S. D., Rapid City—Pub. Housing Auth., NHA, 201 N. Wells St., Chicago 6, Ill., 30 unit family dwellings, S.D. 39051.

Tex., Austin—University of Texas Veteran's Advisory Service Com., Austin Housing Auth., and City of Austin, plan housing unit. $450,000.

Tex., Dallas—Vickery Independent School Dist., Hillcrest Rd., plans $160,000 bond election soon, school.

†Tex., Harlingen — Pub. Housing Auth., NHA, 1411 Electric Bldg., 7 and Lamar Sts., Fort Worth, Zone 2, 300 unit family stop-gap housing, Tex. 41692.

†Tex., Houston—Consolidated Chemical Industries, Inc., M. Esperson Bldg., plant unit. $90,000. Defense Plant Corp. will finance.

★**†Tex., Legion**—Veterans Admin., Vermont Ave. between H and I Sts. N.W., Wash. 25, D. C., hospital expansion. $2,071,124.

★**†Tex., Lisbon (near Dallas)**—Veterans Admin., Vermont Ave. between H and I Sts. N.W., Wash. 25, D. C., hospital expansion. $2,588,905.

★**†Tex., Lubbock**—Veterans Admin., Vermont Ave. between H and I Sts. N.W., Wash. 25, D. C., 250-bed hospital, $1,940,262.

†Tex., Midland—Pub. Housing Auth., NHA, 1411 Electric Bldg., 7 and Lamar Sts., Fort Worth, Zone 2, 100 unit family stop-gap housing, Tex. 41691.

†Tex., Sweeny—Pub Housing Auth., NHA, 1411 Electric Bldg., 7 and Lamar Sts., Fort Worth, Zone 2, 40 unit family dwellings, Tex. 41666.

†Tex., Waco—Veterans Admin., Vermont Ave. between H and I Sts. N.W., Wash. 25, D. C., warehouse. $40,000.

†Utah, St. John—Pub. Housing Auth., NHA, 760 Market St., San Francisco, Calif., 75 unit family dwellings, Utah 42203.

†Virginia—U. S. Eng., 21 St. and Virginia Ave. N.W., Wash. D. C., addnl. bldgs., enclosing covered walks, sprinkler sys., mechanical ventilation and nurse's call sys., etc., at McGuire General Hospital, Chesterfield Co.

†Va., Norfolk and Portsmouth—Pub. Housing Auth., NHA, Longfellow Bldg., Connecticut Ave. at M St. N.W., Wash. 25, D. C., 96 unit single person dwellings, Va. 44242; 30 unit family stop-gap housing, Va. 44343.

†Wash., Bremerton—Pub. Housing Auth., NHA, Skinner Bldg., 5 and Union Sts., Seattle, Zone 1, 100 unit housing and recreational bldg., Sinclair Park. $400,000.

†Wash., Walla Walla—Veterans Admin., Vermont Ave. between H and I Sts. N.W., Wash. 25, D. C., rehabilitating bldg. 68 at Veterans Hospital. $33,115.

Alta., Calgary—Dominion Govt., c/o National Research Council, Ottawa, Ont., hydrogenation experimental plant. $300,000.

★**Alta., Edmonton**—Dominion Govt. Veterns Land Act, 9907 Jasper Ave., preparing plans 300 residences. $1,500,000.

Man., Flin Flon—Municipality, G. Murton, secy., power and lighting plant. $150,000.

Man., Winnipeg—Municipality, tuberculosis hospital. $250,000.

★**Man., Winnipeg**—Wartime Housing, Ltd., 55 York St., Toronto, Ont., 100 houses. $400,000-$500,000.

★**N. S., Halifax**—Dominion Govt. Veterans Land Act, Confederation Bldg., 1253 McGilli College Ave., Montreal, Que., plans by L. P. Gauthier, c/o owner, residences for war veterans. $600,000-$800,000.

★**N. S., Halifax**—Halifax School Bd., Col. G. S. Kinley, vice-chn., plans by C. A. Fowler & Co., Capitol Bldg., high school, Bell Rd and Trollop St. $500,000.

Ont., Fort William—Dominion Govt., c/o Ministry of Veterans Affairs, Ottawa, 24 dwellings. $150,000.

Ont., Galt—Galt Bd. Educ., D. McIntish, chn., J. M. McGregor, secy., plans by Page & Steele, 20 St. Claire Ave. W., Toronto, school. $150,000.

Ont., Kitchener—Kitchener Public Utilities Comn., King St. W., plans sub-station, Kaukel St. About $75,000.

★**Ont., Ottawa**—Dominion Govt. Veterans Land Act, Ottawa, preparing plans 100 houses. $500,000.

Ont., Port Arthur—Dominion Govt., c/o Ministry of Veterans Affairs, Ottawa, 24 dwellings. $150,000.

★**Ont., Toronto**—Dominion Govt. Veterans Land Act, Toronto, preparing plans residences. $2,450,000.

Ont., Wheatley—Municipality, R. N. Epplett, clk., high school. $150,000.

Ont., Windsor—Municipality, c/o Library Bd., City Hall, memorial library, Willistead Park. $150,000.

Sask., Estevan—Provincial Govt. of Saskatchewan, Regina, altering brick plant. $.0,000.

BIDS ASKED

Bids Asked February 23

†Ariz., Phoenix—Pub. Bldgs. Admin., 18 and F Sts. N.W., Wash., 25, D. C., 40 bed contagious disease ward, at St. Monica's Hospital, Ariz. 2-134-3. **FWA.** Lescher & Mahoney, 1100 Title & Trust Bldg., archts. CD 1/10—ENR 1/18.

Bids Asked February 24

†Calif., Sausalito—Pub. Housing Auth., NHA, 760 Market St., San Francisco, fire-safing measures on dormitory projects, Calif. 4311. W. P. Day & H. M. Michelson, 405 Montgomery St., San Francisco, archts. CD 1/19—ENR 1/25.

Bids Asked February 27

Minn., Jackson—City, A. E. Wallace, clk., City Hall, furnishing, installing steam generating unit, incl. necessary equip. at municipal power plant. $40,000. Extended date. J. B. Harris Co., 702 Wesley Temple Bldg., Minneapolis, engr. CD 1/24—ENR 2/1.

Bids Asked February 28

†Ariz., Phoenix—Pub. Bldgs. Admin., 18 and F Sts. N.W., Wash. 25, D. C., Isaac School addn., School Dist. 5, Maricopa Co., near here, Ariz. 2-904-1. **FWA.** Extended date. Lescher & Mahoney, 1100 Title & Trust Bldg., archts. CD 1/24—ENR 2/1.

Bids Asked March 1

†Ark., Camden—Pub. Housing Auth., NHA, 1411 Electric Bldg., 7 and Lamar Sts., Fort Worth, Tex., 50 family unit housing, Ark. 3142. Plans deposit $50. Wittenburg & Delony, Pyramid Bldg., Little Rock, archts. CD 12/7—ENR 12/14.

†Pa., Phila.—Mercy Hospital and School for Nurses of Philadelphia, at office J. H. Graves, M. D., dir., Mercy Hospital, 5000 Woodlawn Ave., nurses home, Pa. 36-202. **FWA.** Plans deposit $10. H. R. Robinson, 1927 11 St. N.W., Wash. 1, D. C., archt.; adv. ENR—2/15. CD 1/30—ENR 2/8.

Bids Asked March 3

†Wash., Tacoma—Tacoma Housing Auth., Provident Bldg., 192 unit dormitory housing. Proj. 45307, for NHA. $200,000. Tacoma Architect's Assn., Perkins Bldg., archts.

Bids Asked March 6

†Pa., Aspinwall (br. Pittsburgh)—Veterans Admin., Vermont Ave. between H and I Sts. N.W., Wash. 25, D. C., passenger elevator and hatchway for Bldg. 1, at Veterans Hospital, Proj. 2372. CD 2/6—ENR 2/8.

Bids Asked March 9

†Fla., Pensacola—Pub. Housing Auth., NHA, Georgia Savings Bank Bldg., Peachtree and Broad Sts., Atlanta, Ga., disassemb-

PUBLIC BLDGS. (Bids Asked. Cont'd.) ling 200 dwelling units, 52 units, Miss. 22162, and 48 units, Miss. 22170, in Grenada, Miss., and 10 units, Pa. 36391, Canonsburg, Pa., transporting all to site of housing, Fla. 8219, here, and reassembling same, constructing utilities, etc. Yonge & Hart, Thiesen Bl., archts.

Bids Asked March 20

★**†Wis., Tomah**—Veterans Admin., Vermont Ave. between H and I Sts. N.W., Wash. 25, D. C., Hospital Bldgs. 401, 402, 403, 404, 405, 406, 415, 416, 417, Main Bldg. 400, Radal Brick Chimney 418, connecting corridors, roads, walks, grading, drainage, excav., etc., Project 2244. $5,000,000. CD 12/12—ENR 12/14.

Bids Asked

★**†T. H., Honolulu**—U. S. Eng., Honolulu, hospital. Foundations by own forces. CD 7/20—ENR 7/27.

LOW BIDDERS

★**†Ky., Lexington**—Veterans Admin., Vermont Ave. between H and I Sts. N.W., Wash. 25, D. C., Feb. 6, bldgs., utilities, from R. P. Farnsworth & Co., Inc., P. O. Box 850, New Orleans, La., **$1,382,500.** CD 12/26—ENR 12/28.

CONTRACTS AWARDED

★**†Ala., Gadsden**—Goodyear Tire & Rubber Co., Gadsden, and 1144 E. Market St., Akron, O., tire factory addn., to A. K. Adams Co., 542 Plum St. N.W., Atlanta, Ga. **$1,000,000.** Defense Plant Corp. will finance. Robert & Co., Bona Allen Bldg., Atlanta, engrs. and archts. CD 2/7.

†Calif., Benicia—U. S. Eng., 74 New Montgomery St., San Francisco, relocating rigger's bldg., at Benicia Arsenal, Job No. 1881, to H. H. Larsen Co., 64 S. Park St., San Francisco, **$46,115.** Awarded 2/5.

★**†Calif., Inyokern**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., 1 story, rein.-con. high and grammar school bldg., Navy Ordnance Test Station, to Macco-McKittrick-Morrison, 639 S. Spring St., Los Angeles, approx. **$750,000.** H. L. Gogerty, 6353 Yucca St., Hollywood, archt. Stafford & Davies, Ocean Center Bldg., Long Beach, engrs.

★**†Calif., Inyokern**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., experimental plant, Naval Ordnance Testing Station, NOY 11847, to Haddock Engineers, Ltd., 225 Brush St., San Francisco. Est. **$50,000,000.**

★**†Calif., Mare Island**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., heavy material storehouse, Navy Yard, Spec. 15499, NOY 11164, to J. H. Pomeroy & Co., Inc., 333 Montgomery St., San Francisco. **$865,417.** Bids 1/30. CD 2/7.

†Calif., San Diego—Pub. Housing Auth., NHA, 760 Market St., Phelan Bldg., San Francisco, sidewalk imprvs., housing, Calif. 4092, to Griffith Co., 1060 S. Bway., Los Angeles, **$39,546.**

†D. C., Wash.—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., office bldg., Naval Communications Annex, NOY 11849, to J. A. Parks, National Metropolitan Bank Bldg.

†Ga., Warm Springs — Warm Springs Foundation, at office of H. J. Toombs, archt., 706 Peters Bldg., Atlanta, hospital addn., Ga. 9-345, to John A. Johnson Corp., Forsyth Bldg., Atlanta, **$291,258. FWA. Bids 1/15.** CD 12/27—ENR 1/4.

†Ind., Hammond — Federal Emergency Warehouse Assn. of Chicago, 208 W. Washington St., Chicago, Ill., 3 brick, concrete steel warehouse bldgs., imprvs., to Carroll Constr. Co., 333 N. Michigan Ave., Chicago, Ill. **$250,000.** Defense Plant Corp. will finance. K. Franzheim & A. B. Mills, both 728 17 St. N.W., Wash., D. C., archts.

★**†Ind., Hammond**—Stauffer Chemical Co., 5801 Indianapolis Blvd., sulphuric acid plant, to Leonard Constr. Co., 37 S. Wabash Ave., Chicago, Ill., **$650,000.** Defense Plant Corp. will finance. CD 1/12—ENR 1/18.

★**†Kan., De Soto**—U. S. Eng., 10 E. 17 St., Kansas City, Mo., 13 press bldgs., to Corbetta Constr. Co., 220 E. 42 St., New York, N. Y., **$272,305;** 26 addnl. mfg. bldgs., to Peter Kiewit Sons Co., Omaha Natl. Bank Bldg., Omaha, Neb., **$233,058,** foregoing at Sunflower Ordnance Plant. Bids 2/5.

★**†Ky., Paducah**—War Dpt., The Pentagon, Arlington, Va., P. O. Address, Wash. 25, D. C., chemical plant to increase production, at ordnance plant, to Rust Eng. Co., Clark Bldg., Pittsburgh, Pa. Over **$1,000,000.**

★**†Md., Dundalk (br. Baltimore)**—Baltimore Co. Bd. Educ., Towson, high school, Md. 18-902-C, to John McShain, Inc., 3 W. Franklin St., Baltimore, **$738,150. FWA.** CD 2/1—ENR 2/8, under LB.

★**†Mich., Dearborn**—Veterans Admin., Vermont Ave. between H and I Sts. N.W., Wash. 25, D. C., addnl. bldgs., utilities, etc., Proj. No. 2079, to F. H. McGraw & Co., 780 Windsor St., Hartford, Conn., **$3,000,947.** Bids 1/9. CD 1/10—ENR 1/18, under LB.

Minn., Jackson—City, A. E. Wallace, clk., City Hall, furnishing, installing 2,000 kw. turbine generator, at municipal power plant, to Elliott Co., 216 Baker Bldg., Minneapolis, **$61,525;** condenser, to Worthington Pump & Mchy. Corp., 2428 University Ave., St. Paul, **$13,500.** Bids 1/23. CD 1/3—ENR 1/11.

†Miss., Aberdeen—U. S. Eng., Grant St., west of Westwood St., Mobile, Ala., furnishing, erecting structural steel for Gulf Ordnance Plant, to Steel Constr. Co., 720 4 Ave. S., Birmingham, Ala., **$176,120.** CD 1/26—ENR 2/1.

†Mo., Normandy (St. Louis 21, P. O.)—St. Vincent's Sanitorium, Sister Margaret, admin., 7300 St. Charles Rock Rd., Normandy, St. Louis 21, brick, concrete nurses home, etc., Mo. 23-297N, to Woermann Constr. Co., 3800 W. Pine Blvd., St. Louis, Zone 8, **$164,000. FWA.** CD 1/23—ENR 1/25.

★**†Mo., Weldon Springs**—War Dpt., The Pentagon, Arlington, Va., P. O. Address, Wash., 25, D. C., chemical plant, to increase production, at ordnance plant, to Rust Eng. Co., Clark Bldg., Pittsburgh, Pa. Over **$1,000,000.**

★**†Mo., St. Louis**—U. S. Eng., 816 U. S. Courthouse & Customhouse, Zone 2, structural changes in group bldgs., St. Louis Ordnance Plant, to Fruco Constr. Co., Merchants-Laclede Bldg., **$1,285,000.**

†Neb., Sidney—U. S. Eng., 909 17 St., Denver, Colo., floor paving, Sioux Ordnance Depot. Contr. W-05-016-Eng-284, to S & O Constr. Co., Denver, Colo., **$35,137.**

Pa., Ambridge—Commonwealth of Pennsylvania, c/o A. J. Warlow, ch. engr., Dpt. Property & Supplies, Harrisburg, restoration tailor shop, wine cellar and store, Old Economy, to H. Busse, 112 Wabash St., Pittsburgh, Zone 20, **$250,000.** Awarded 2/6.

★**†Pa., Pottstown**—Firestone Tire & Rubber Co., 1278 S. Main St., Akron, O., and Pottstown, tire mfg. plant, converting former Jacobs Aircraft Corp. plant into tire mfg. plant, to Day & Zimmerman, Inc., Packard Bldg., Phila. Est. **$7,000,000.** Awarded 2/6. Defense Plant Corp. will finance. Giffels & Vallet, Inc., 1000 Marquette Bldg., Detroit, Mich., engrs. and archts. L. Rossetti, 1000 Marquette Bldg., Detroit, Mich., assoc. archt. CD 2/7.

★**†Pa., Spring Mill (P. O. Conshohocken)**—Lee Tire & Rubber Co., F. Leopold, ch. engr., tire mfg. plant expansion, to Stoffiet & Tillotson, 2043 Eastburn Ave., Phila., **$600,000.** Awarded 2/8. Defense Plant Corp. will finance.

★**†Tex., Dumas**—U. S. Eng., 416 Wright Bldg., Tulsa 2, Okla., addnl. construction, Cactus Ordnance Works, to Brown & Root, Inc., 4300 Calhoun Rd., Houston, **$500,000.**

★**†Tex., Houston** — Kelly-Springfield Tire Co., 407 N. Main St., rubber tire (truck) mfg. plant, to Brown & Root, Inc., 4300 Calhoun Rd., P. O. Box 3, approx. **$6,150,000.** Defense Plant Corp. will finance. Awarded 2/2. CD 1/29—ENR 2/1, under Industrial.

★**†Tex., Houston**—Rheem Mfg. Co., 1401 Lockwood Dr., 1 story, 240x746 ft., prefabricated structural steel war plant addn., to Erwin-Newman Co., Almeda Rd., **$960,000.** $3,125,000 allotted. Defense Plant Corp. will finance. CD 2/9—ENR 2/8.

★**†Va., Orange**—Snead & Co., Orange, will build and operate plant. Est. **$500,000.** Defense Plant Corp. will finance. CD 2/6—ENR 2/8.

COMMERCIAL BUILDINGS

PROPOSED WORK

Ill., Arlington Heights—Lutherans Old Folks Home, 508 Northwest Hy., 2 story, brick, concrete Old Folks Home. $150,000.

Ill., Chicago — Ravenswood Presbyterian Church, 4300 N. Hermitage, plans by B. F. Olsen, 19 S. La Salle St., parish hall, remodeling 2 story, 88x114 ft., brick church and chancel. $175,000.

Ill., Chicago—George Washington Carver Gardens, Inc., N. C. Farr, pres., 69 W. Washington St., plans by Skidmore, Owings & Merrill, 100 W. Monroe St., 12 row housing units and three 2 story apartment bldgs. $150,000.

Ind., Indianapolis—Pub. Service Co. of Indiana, Terminal Bldg., office bldg., Michigan and Meridian Sts. $160,000 or more.

Md., Middle River—Hal A. Miller & Associates, archts., 421 St. Paul Pl., Baltimore, Zone 2, soon lets contract 1 story, bsmnt., 44x140 ft. theatre, nine 116x230 ft. stores, for N. Schwartz, 20 W. 29 St., New York, N. Y. $250,000. Form bids rejected. CD 8/9—ENR 8/17.

Neb., Omaha—Salvation Army, c/o Brig. Gen. G. Ryan, 208 S. 13 St., plans by John Latenser & Sons, 1307 Farnam St., summer camp, incl. WW, walls, sewer, cottages, swimming beach, etc., on Platte River, 14 mi. south of here. $100,000.

Tex., Houston—R. C. West & Associates, Plaza Hotel, making plans 1 story, 60x225 ft., brick, structural clay tile and concrete community center, Wayside Dr. and Telephone Rd. $200,000.

Wash., Spokane—Sacred Heart Hospital, W. 101-8 St., 2 story hospital addn. $200,000. FWA funds sought.

Alta., Medicine Hat—General Hospital Bd., Medicine Hat, plans by Green-Blankstein-Russell & Ham, 310 Time Bldg., Winnipeg, Man., hospital. $150,000.

Man., Winnipeg—Anglican Parish of St. Matthew, Rev. W. D. Gant, pastor, Maryland St. and St. Matthews Ave., church. $150,000. Col. J. N. Semmens, 460 Wellington Crescent, engr.

Man., Winnipeg—F. R. Lount, 128 Monrose St., 40 dwellings. $160,000.

Ont., Oshawa—H. R. Stark, Oshawa, 32 single dwellings, store and apartment. $200,000.

Ont., Timmins—Goldfields Hotel, Timmins Ltd., c/o Dr. P. Boutin, Timmins, hotel. $150,000.

Que., Montreal—Biltwell Realties, Ltd., 5549 Queen Mary Rd., plans by M. M. Kaufman, 4910 Victoria Ave., apartment houses. $150,000.

Que., Montreal—S. Shenkman, 2051 Peel St., plans by Luke & Little, 1410 Guy St., apartment. $200,000.

Sask., Saskatoon—Matheson Clinic, Inc., c/o J. Spight, mgr., Saskatoon, hospital, 20 St. and Spadina Crescent. $150,000.

Yukon Territory, Whitehorse — Catholic Episcopal Corp., c/o Right Rev. J. L. Coederi, Whitehorse, church and presbytery. $150,000.

BIDS ASKED

Bids Asked February 20

Mo., St. Louis—St. Joan of Arc Catholic Parish, c/o Rev. M. F. Cronin, pastor, 5321 Pernod Ave., Zone 9, 3 story, part 1 story, 60x180 ft. school addn., present chapel on grounds to be enlarged, etc., stone veneer and rein.-con. addn., Pernod Ave. H. P. Hess, 1001 Ambassador Bldg., 411 N. 7 St., Zone 1, archt. CD 2/2—ENR 2/8.

CONTRACTS AWARDED

Calif., Beresford—George Arthur & Sons, 941 S. Claremont St., San Mateo, forty 1 story, frame, stucco residences. Owner builds. To exceed **$150,000.** O. R. Thayer, 1257 Cabrillo Ave., Burlingame, archt.

Calif., San Francisco—Atlas Realty Co., 1500 Judah St., thirty-three 2 story, frame flats, vicinity of Taraval St., 28, 33, 34, 36, 38, 41 and 43 Aves., to Pacific Coast Constr. Co., 1500 Judah St. Est. **$6,000** each.

Ill., Chicago—W. Schuknecht, 3550 W. Fullerton St., 11 two story apartments, 4230-63 W. Nelson St. Owner builds. **$375,000.** B. J. Bruns, 4734 N. Hermitage St., archt.

Tex., Beaumont—H. A. Perlstein, Beaumont, 5 story, brick, concrete office and store bldg., with two 57x80 ft. wings, to C. H. Treadwell, 1523 Centenary Bld., Shreveport, La., approx. **$200,000.** CD 12/29—ENR 1/4.

Tex., Houston—Elrod Housing Co., Warwick Hotel, thirty-six 1 and 2 story dwellings, force account. **$175,000.** CD 2/7.

INDUSTRIAL BUILDINGS

PROPOSED WORK

★**Calif., Sausalito** — CANNERY — V. B. Alioto, c/o Natalie J. Holley, atty., Cheda Bldg., San Rafael, 150x250 ft. sardine and tuna cannery, incl. bldg., dredging, piling fill-in, etc., on 240x400 ft. water block site. $1,000,000.

Calif., Winters—WAREHOUSE—California Fruit Exchange, 40 and N Sts., Sacramento, plans by H. J. Devine, Cronan Bldg., Sacramento, 1 story, bsmnt., masonary fruit packing warehouse. $60,000.

Colorado—PUMPING STATION, etc.—Utah Oil Refining Co., Utah Oil Bldg., Salt Lake City, Utah, and Wamsutter, Wyo., crude oil pipeline pump. stations between Rangely and Craig, $100,000; steel tank crude oil storage, Rangely and Craig, $100,000.

Colo., Denver—DIESEL SHOP—Chicago, Burlington & Quincy R. R. Co., H. R. Clarke, ch. engr., 547 W. Jackson Blvd., Chicago, Ill., soon lets contract 72x73 ft., concrete, steel, brick, diesel shop bldg. CD 10/30—ENR 11/2.

Colo., Pueblo—BUS DEPOT—Denver-Colorado Springs-Pueblo Motor Way, Inc., Denver, soon lets contract 1 story, 75x90 ft. stucco on masonry bus depot. $40,000. W. H. Simon, 2088 Dahlia St., Denver, archt. CD 1/23—ENR 1/25.

Conn., Stamford — STORAGE UNIT — Northam-Warren Corp., Barry Pl., plans by D. Mansell, 24 Park Row, 1 story, 50x140 ft., brick, steel storage unit.

Conn., Winsted—FACTORY—Hudson Wire Co., O. F. Bitzer, genl. mgr., Winsted, 1 story, 70x140 ft., brick factory. $40,000.

Ga., La Grange—MILL—West Point Mfg. Co., c/o Mr. Horsky, West Point, soon lets contract 2 story, 30x220 ft. addn., to Dixie Cotton Mills. Robert & Co., Bona Allen Bldg., Atlanta, archts. CD 1/31—ENR 2/1.

Ill., Chicago—MANUFACTURING—Bauer & Black, 2500 S. Dearborn St., 1 and 3 story, brick, concrete, steel, glass block addnl. mfg. bldgs., addns. Over $40,000. Battery & Childs, 231 S. LaSalle St., engrs.

Ill., Chicago—PLANT—Clearing Machine Corp., 6499 W. 65 St., 1 story, 67x187 ft.

STRIAL BLDGS.—Proposed Work, nt'd.)
7x140 ft., concrete, brick, steel hy- press bldg. addn. Over $40,000.
Columbus—MILL, etc.—The Dunlap Columbus, rebuilding mill and 4 story ouse destroyed by fire, $40,000 or more.
Tipton—PLANT—Tipton Furniture Tipton, rebuilding plant, destroyed by 40,000 or more.
New Iberia—FROZEN FOOD LOCKER NT—Dr. W. R. Dodson, secy-mgr. of ber of Commerce and chn. Iberia n Food Locker Assn., New Iberia, plans L. Taures, Refrigerating Equip. Co., Rouge, 1 story, 32x75 ft. frozen food plant, rein.-con.
Queen Anne—WAREHOUSE—Horace lorgan, Queen Anne, rebuilding ware- $70,000.
J., Beverly—WAREHOUSE—Massasoit Beverly, repairing warehouse. $45,000.
J., Fairview—BUS TERMINAL and AGE—Orange and Black Bus Lines, Park Ave., Guttenberg, plans by G. Mett- 79 W. Palisade Blvd., Palisade, 1 story, 50 ft., concrete block bus terminal and e. $75,000.
J., Hightstown—STOREHOUSE—Cen- Jersey Farmers Co-Operative Assn., Inc., Block, mgr., rebuilding mill and feed storehouse. $250,000.
J., Ridgefield—TRUCK TERMINAL— Motor Freight Co., 1155 Hendricks Ave., West New York, truck terminal. 000.
Cincinnati—MANUFACTURING—Bald- Co., 1801 Gilbert Ave., mfg. bldg. 000.
Cleveland—PLANT—Chase Brass & Copper Co., 236 Grand St., Waterbury, n., preparing plans, brick, steel plant Over $40,000. Stone & Webster rg. Corp., 49 Federal St., Boston, Mass., rs.
Cleveland—FACTORY—Linderme Tube B. J. Higgens, plant, supt., 1509 E. 219 preparing plans 1 story, 60x180 ft. brick, l factory, and 25x120 ft. machine shop. 000. E. G. Hoefler, 5005 Euclid Ave., r.
kla., Wynne Wood—REFINERY—Kerlyn Co., First Natl. Bldg., Oklahoma City, uilding refinery, increasing capacity from 0 bbl. to 3,500 bbl. per day addnl. plant rvs. $75,000.
re., Wilderville—PLANT—Muck Trucking Constr. Co., 5255 N. E. 74 St., Portland, hol from lime and coke plant. $250,000. M. Muck, 5255 N. E. 74 St., Portland, r.
a., Phila.—PLANT—Briscoe Box Co., A. Ritner, managing dir., Venango and rnock Sts., making plans mfg. bldg. alter- ns. J. Burton Myers, 3359 Hollywood cle, Merchantville, N. J., engr.
a., Phila.—PLANT—M. Oslick, 461 N. 2 repairing 3 story plant. $45,000.
I., Providence—FACTORY—H. Sandsea, Westminster St., soon lets contract 1 2 story, 80x160 ft., brick, steel factory. nks & Ballou, 2600 Industrial Trust Bldg., grs.
Tex., Amarillo—HATCHERY—R. Atkis- , Amarillo, plans by E. F. & Jas. F. Rit- berry, Fisk Bldg., 1 story, 50x141 ft., ck, hollow tile hatchery bldg., concrete n., etc. $40,000.
Tex., Amarillo — MAINTENANCE and ORAGE—Southwestern Grayhound Lines, marillo, plans by M. O. Carder, 317 Fisk dg. 1 story, 125x200 ft., brick, steel me- anical maintenance and storage bldg. 0,000.
Tex., Austin — WAREHOUSE — Red & hite Stores, 230 Dakota St., San Antonio, story, 100x200 ft., structural clay tile arehouse. $60,000. W. E. Simpson Co., Milam dg., San Antonio, engr.
Tex., Houston—PLANT—National Vinegar , 520 Pine St., reconstructing vinegar mfg. ant. $100,000.
Tex., Houston — WAREHOUSE—Southern ngine & Pump Co., 900 St. Charles St., soon ts contract warehouse unit and altering arehouse, $45,000. R. J. Cummins, Bankers ig. Bldg., engrs. CD 1/24—ENR 2/1.
Tex., Texas City—AIR COMPRESSOR— an-American Refining Co., Texas City, soon ts contract brick, rein.-con. air compressor dg. $40,000.
Utah, Ogden — PLANT — Weber Central Dairy Assn., Ogden, soon lets contract dairy roducts processing plant. L. S. Hodgson, ccles Bldg., archt.
Wis., Milwaukee—ENGINE HOUSE—Chi- ago & North Western Ry. Co., B. R. Kulp, n. engr., 400 W. Madison St., Chicago 6, Ill., altering engine house, $50,000.
Wis., Port Washington—POWER PLANT —Wisconsin Electric Power Co., 231 W. Michigan St., Milwaukee, Zone 3, plans by Luber. Jr., c/o owner, electric power lant addn., 3rd unit 80,000 kw. electric enerating unit. $7,119,500.
Wis., Wittenberg—MILK PLANT, etc.— . A. Geniesse, archt., 26 N. Washington St., reen Bay, soon lets contract 1 story, 82x189 t., and 1 story, 48x82 ft., milk plant and ower house, rein.-con., brick, for Consoli- dated Badger Co-Operative, Shawano. CD 12/5—ENR 12/7.

★**Wyo., Cowley**—PLANT—General Petroleum Corp., Cowley, skimming plant, $750,000; crude oil loading racks, facilities, $75,000.
Alaska, Craig—PLANT—J. D. Kearns, Prince Rupert, B. C., Canada, fish reduction plant for production of meal and salmon oil. $125,000.
Alta., Calgary—BAKERY—Palace Bakery, Inc., 818 Second Ave. N.W., bakery. $75,000.
B. C., New Westminster—PLANT—Westminster Paper Co. Ltd., New Westminster, 3½ story, 111x126 ft. finishing plant exten., 2 story, 130x177 ft. machine shop, rein.-con., also boiler house exten. $200,000.
B. C., Vancouver — PLANT — Frederick Goertz Ltd., 369 Howe St., plant addn. $50,000.
B. C., Vancouver — FACTORY — Western Plywood Co., Ltd., 675 Hastings St., preparing plans 160x210 ft., factory, 22 ft. high, Fort Fraser St. About $200,000.
N. B., Moncton—PLANT—Crystal Ice Co. Ltd., 5 Seaton St., St. John, plant. $56,200.
N. S., Lunenburg — PLANT — Lunenburg Sea Products Ltd., Lunenburg, modernizing freezing plant. $50,000.
Ont., Kent Centre (P. O. Chatham) — PLANT—I. Maynard, Kent Centre, seed cleaning and processing plant. $100,000.
Ont., Larder Lake—DIAMOND DRILLING, etc.—Garrymac Gold Mines, Ltd., Larder Lake, diamond drilling, camp bldgs., etc. $100,000. General Engineering Co. Ltd., 100 W. Adelaide St., Toronto, engrs.
Ont., London — PLANT — Wright Lithographing Co., F. Wright, mgr., 424 Wellington St., plant. $150,000.
Ont., Ottawa — PLANT — Crain Printers Ltd., 63 Sparks St., plant. $70,000.
Ont., Owen Sound—FACTORY—Noma Toys Ltd., Owen Sound, factory. $40,000.
Ont., Port Credit—PLANT—Dome Exploration Co. Quebec Ltd., Port Credit, diamond drilling at Campbell Red Lake, 2 mi. east of Cochenour-Willans in Red Lake area. $60,000. R. A. Shatford, c/o owner, engr.
Ont., St. Catherines — PLANT — Welland Vale Mfg. Co. Ltd., St. Catherines, tool plant addn. $50,000.
Ont., Toronto—FACTORY—S. F. Bowser Co. Ltd., 183 George St., factory. $75,000. Site purchased.
Ont., Toronto—PLANT—Brigdens Ltd., 160 W. Richmond St., engraving plant addn., etc. $50,000.
Ont., Toronto—PLANT—National Screw Products Corp., 629 Northcliffe Blvd., plans by V. Demelis, 608 Rushton Rd., 10x50x100 ft., concrete block, brick plant. About $40,000.
Ont., Toronto—FACTORY—National Sewer Pipe Ltd., 320 Bay St., factory alterations.
Ont., Toronto—PLANT—Rota Plow Ltd., c/o L. B. Campbell, 330 E. St. Clair Ave., agricultural machinery, ploughs, etc. mfg. plant. $50,000.
Ont., Toronto — PLANT — Steel Kitchen Equipment Co. Ltd., M. Soren, 11 Brant St., kitchen equipment and refrigerator mfg. plant exten. $40,000.
Que., Acton Vale—PLANT—Acton Shoe Co. Ltd., 50 W. St. Paul St., Montreal, plans by Gascon & Parent, 994 E. Ste. Catherine St., Montreal, plant addn. $40,000.
Que., Chicoutimi—PLANT, etc.—La Societe Co-operative Agricole de Chicoutimi, H. Rochefort, secy., A. Tremblay, mgr., Port St., abbatoir and egg grading plant, about $40,000; grain and feed mill, $45,000.
Que., Montreal — FACTORY — Atlantic Woolens Ltd., c/o M. S. Yelin, 231 W. St. James St., factory. $45,000.
Que., Montreal — PLANT — Chesebrough Mfg. Co. Ltd., 5520 Chabot St., plant addn., Chabot St.
Sask., North Battleford—PLANT—Standard Mineral Water Works, Inc. North Battleford, bottling plant addn., etc. $50,000.

BIDS ASKED

Bids Asked February 26

Mass., Walpole—PLANT—Ranger Corp., 2000 Main St., 1 story, 50x145 ft., brick, steel plant addn. Plans deposit $10. F. Burton Mitchell, P. O. Box 147, Foxboro, engr.

Bids Asked in March

Mass., Cambridge—WAREHOUSE—United Distributors, 281 Vassar St., Cambridge, plans by B. Mion, 3030 Tennyson Ave. N.W., Wash., D. C., brick, warehouse, incl. offices, Memorial Dr.

Bids Asked After March 15

Me., Oldtown — GARAGE AND SHOW ROOM—J. Murphy, Court St., Bangor, 1 story, 68x72 ft., and 22x38 ft., concrete, steel garage and showroom, **$40,000** incl. equip. E. W. Tarbell, 84 Harlow St., Bangor, archt.

Bids Asked

Ill., Chicago — FACTORY — S. Klefstad, archt., 3600 W. Fullerton Ave., 1 story, 59x105 ft. brick factory, 6549-53 George St., for Amco Mfg. Co., 2319 N. Springfield Ave.
Ill., Chicago — FACTORY — S. Klefstad, archt., 3600 W. Fullerton Ave., 1 story, 100x150 ft., concrete, steel factory addn., for Illinois Gage Co., 7810 W. Addison St. CD 1/26—ENR 2/1.
N. J., Newark — WAREHOUSE — Fiske Bros. Refining Co., 129 Lockewood St., 2 story, 50x175 ft. warehouse and mfg. plant bldg. $100,000. R. Klemm, 944 Broad St., archt. CD 10/17—ENR 10/19.
N. J., Nutley—FACTORY—Schifter Motors Corp., 89 Washington Ave., and R. Bottelli, archt., 45 Branford Pl., Newark, 1 story, 75x118 ft., concrete block factory. $50,000.
Pa., Johnstown—MANUFACTURING—Air Reduction Sales Co., 60 E. 42 St., New York 17, N. Y., manufacturing bldg. $287,000. A. McKegney, c/o owner, ch. engr. CD 1/10—ENR 1/18.
Pa., Pittsburgh — FACTORY — Marks & Simboli, archts., 702 Grogan Bldg., 2 story, 63x75 ft., 1 story, 60x100 ft., brick factory addns., for Palley Mfg. Co., J. Lewis Palley, pres. and genl. mgr., 1017 Bidwell St. $60,000.
★**Tex., Carthage**—PLANT—Chicago Corp., Tennessee Gas & Transmission Co., Commerce Bldg., Houston, recycling plant. $2,000,000. CD 1/11/44—ENR 1/3/44.

LOW BIDDERS

Tex., Brookshire — FROZEN FOOD LOCKER—Sam Bernard Electric Cooperative, Belleville, 1 story 42x80 ft. frozen food locker bldg. brick, tile, concrete, from R. E. Balwin, 718 Kirby Bldg., Houston. H. Guiberson, 366 Blevins St., Fort Worth, archt.
Tex., Hempstead — FROZEN FOOD LOCKER—San Bernard Electric Cooperative, Belleville, 1 story, 40x80 ft., frozen food locker, incl. quick freeze units, etc., brick, tile, rein.-con. fdn., from R. E. Baldwin, 718 Kirby Bldg., Houston, **$40,780.** H. Guiberson, 366 Blevins St., Fort Worth, archt.

CONTRACTS AWARDED

Calif., Dunnigan—GRAIN BINS—Berlinger Bros. & King Landale, 731 3 St., Woodland, 43 grain bins, concrete, to Ward Hunt & Son, Dunnigan. Est. **$100,000.**
Ill., Chicago—FACTORY—Honey Bee Co., 1915 W. 19 St., 1 story, 75x115 ft., brick factory, to J. Wallewski, 5022 W. Sunnyside St. **$40,000.** W. Sevic, 1900 Blue Island Ave., archt.
Ill., Chicago—DAIRY—Pure Milk Assoc., 608 S. Dearborn St., 1 story, 50x125 ft. dairy addn., brick, to Lyman Constr. Co., 140 S. Dearborn St., **$40,000.** L. A. Bailey, 1100 N. Dearborn St., archt.
Me., Newport—DAIRY—Whiting Milk Co., Railroad Square, dairy plant, incl. power plant, transformer bldg., pump house, three 20,000 gal. oil tanks, to T. W. Cunningham, Inc., 84 Harlow St., Bangor. Est. **$95,000.** R. D. Kimball Co., 6 Beacon St., Boston, Mass., engr.
Me., Veazie—PLANT—R. N. Nangler, Inc., Orono Rd., concrete mfg. plant. Owner builds. Over **$40,000,** with equip. E. W. Tarbell, 84 Harlow St., Bangor, archt.
Mich., Ann Arbor — SHOP — King-Seeley Corp., Ann Arbor, brick, steel, concrete press shop addn., to W. E. Wood Co., 4649 Hamboldt Ave., Detroit. Est. **$50,000.** Giffels & Vallet, 1000 Marquette Bldg., Detroit, engrs.
Mich., Hamtramck (br. Detroit)—FAN HOUSES—Champion Spark Plug Co., 8525 Butler St., Detroit, brick, concrete plant bldgs. for 2 fan houses, to Barton Malow Co., 2631 Woodward Ave., Detroit. Est. **$45,000.** Giffels & Vallet, 1000 Marquette Bldg., Detroit, engrs.
★**Mo., St. Louis**—PLANT—Monsanto Chemical Co., 1700 S. 2 St., brick, sulphuric acid plant. Unit 7, concrete fdn., to Leonard Constr. Co., 37 S. Wabash Ave., Chicago, Ill., **$700,000.**
N. J., Farmingdale—WAREHOUSE—F. L. F. Farmers Cooperative Assn., Southard Ave., 3 story, rein.-con. storage warehouse to E. C. Machin Co., 512 Hamilton St., Commonwealth Bldg., Allentown, Pa., **$79,550.**
N. J., Paulsboro—PILOT PLANT LABORATORY—Socony Vacuum Oil Co., Paulsboro, 1 and 2 story, brick, concrete lubricating oil pilot plant laboratory bldg., to Skinner, Cook & Babcock, Inc., 60 E. 42 St., New York, N. Y., **$75,000.** F. G. Frost, 144 E. 30 St., New York, N. Y., archt. CD 1/24—ENR 2/1.
Pa., St. Marys—PROCESSING—Stackpole Carbon Co., J. O. Wittman, ch. constr., 201 Tannery St., 1 story, 50x254 ft., brick, glass processing plant, own forces. **$50,000.**
S. C., Columbia—GARAGE—Milling-Nelson Motors, Inc., Columbia, garage, to C. G. Shockley Constr. Co., **$57,850.** Bids 1/30. Lafaye, Lafaye & Fair, Columbia, archts.
Tex., Dallas—WAREHOUSE, etc.—Griffin Mfg. Co., 2401 Hickory St., concrete, hollow tile warehouse, to Jas. F. Chambers, 4415 Glenwood St., approx. **$40,000;** 1 story, 150x205 ft., and 12x50 ft., mezzanine, brick, concrete auto service and storage bldg., force-account, **$48,000.** CD 2/6—ENR 2/8.
Tex., Falfurrias—LUMBER YARD, etc.—Alamo Lumber Co., 900 Transit Tower Bldg., San Antonio, lumber yard and warehouse, to W. E. Crawford, Alice, approx. **$40,000.** CD 1/11—ENR 1/18.
Tex., Pharr—PLANT—Texas Products Co., c/o C. Everhard, Pharr, 1 and 2 story, brick, rein.-con. packing plant, 805 State St., to M. R. Nelson Constr. Co., 1310 Beaumont St., approx. **$150,000.** CD 1/24—ENR 2/1.
Wash., Longview — SAWMILL — Weyerhaeuser Timber Co., Longview, sawmill bldg. addn. for wood experimental plant, to Roy

INDUSTRIAL BLDGS. (Contracts Awarded, Cont'd.)

T. Earley Co., 321 Middle Waterway, Tacoma, est. **$159,293.** CD 1/23—ENR 1/25.

Wis., Milwaukee—FREIGHT TERMINAL—Steffke Freight Co., 710 W. Virginia St., Milwaukee, Zone 4, 1 story, 104x125 ft., steel, brick freight terminal, to Hunzinger Constr. Co., Sta. K, Milwaukee, Zone 13. CD 12/29—ENR 1/4.

Que., Baie Comeau — STORAGE — Quebec North Shore Paper Co., 680 Sherbrooke St., W., Montreal, exten. acid storage bldg. at plant, own forces. About **$100,000.**

UNCLASSIFIED

PROPOSED WORK

Conn., New Haven—FIELD HOUSE—Dpt. Parks, City Hall, bids soon field house, $55,000. R. W. Foote, 157 Church St., New Haven, archt.

†N. M., Roswell—AIRFIELD BLDGS—U. S. Eng., 3 and Gold Sts., Albuquerque, addnl. bldgs. at army airfield. **$150,000.**

Pa., McKeesport—SWIMMING POOL, etc.—Estate of Nettie L. Stone, M. A. Chancellere, exec., 236 5 Ave., swimming pool, incl. bathhouse, lockers, lighting equip., etc. $100,000.

Texas — RURAL ELECTRIFICATION LINES—Guadalupe Valley Cooperative, E. A. Hassman, mgr., at office of Beavers & Lodal, engrs., 1411 Transit Tower, San Antonio, soon lets contract approx. 70 mi. rural electrification lines, Gonzales Co. Plans deposit $25. CD 2/8.

Texas — RURAL ELECTRIC LINES — Karnes Electric Co-Operative, R. H. Hoffman, mgr., Karnes City, at office of Beavers & Lodal, engrs., 1411 Transit Tower, San Antonio, soon lets contract 120 mi. rural electric lines and some conversion, Karnes Co. Plans deposit $20. CD 1/29—ENR 2/1.

B. C., Canyon—RECREATIONAL FIELD—Canyon Park Assn., Canyon, recreational field. $30,000.

B. C., Port Alberni—SPORTS GROUNDS—Junior Athletic Club Port Alberni, sports and recreation grounds. **$25,000.**

B. C., Quesnel—RAILWAY EXTENSION—Pacific Great Eastern Ry. Co., C. L. Bates, ch. engr., 786 Granville St., Vancouver, 40 mi. railway exten.

Man., Oak Lake—RURAL ELECTRIFICATION—Manitoba Power Comn., H. H. Cottingham, chn., 146 Notre Dame Ave E., Winnipeg, electrifying farms in surrounding district homes. $50,000.

Man., St. Boniface—COMFORT STATION—Municipality, comfort station. $40,000.

Man., Winnipeg — DISTRIBUTION SYSTEM—National Utilities Corp. Ltd., New Hargrave Bldg., extend low-tension distr. sys. $200,000.

N. B., Pictou—OIL DEVELOPMENT—Island Development Co., Ltd., Charlottetown, P.E.I., oil development on 210,000 acres, Pictou Co. $150,000.

N. S., Glace Bay—OIL DEVELOPMENT—Sydney Petroleum Co., Ltd., Sydney, oil development on 225,000 acre area. $100,000.

N. S., Halifax—ATHLETIC FIELD, etc.—Municipality, developing city dump as an athletic field and park. $40,000. Civic Planning Com., City Hall, engr.

N. S., Kennetcook—OIL DEVELOPMENT—N. S. Oil & Gas Co., Ltd., Kennetcook, oil development. $90,000.

N. S., Mabou—OIL DEVELOPMENT—Lion Ore Refinery Co., Ltd., Mabou, oil development on 850,000 acre area. $150,000.

N. S., Pictou—OIL DEVELOPMENT—Pictou Petroleum Co., Ltd., Antigonish, oil development on 275,000 acre area. $100,000.

N. S., Stellarton—COAL MINING—Province of Nova Scotia, c/o Ministry of Mines, Halifax, coal mining operations on 5 million ton McBean Seam. $100,000.

Ont., Aylmer—TELEPHONE SYSTEM—Aylmer & Malahide Telephone Co., Inc., Aylmer, telephone sys. $30,000. H. Cohoon, Aylmer, engr.

Ont., Ferris—SPORTS ARENA—Municipality, plans by F. W. Warren, 7 S. Hughson St., Hamilton, sports arena. $60,000.

Ont., Forest—SKATING RINK—Rotary Club, c/o E. H. Matthews, Forest, skating rink. $40,000.

Ont., North Bay—SWIMMING POOL, etc.—Municipality, plans by F. W. Warren, 7 S. Hughson St., Hamilton, swimming pool, gymnasium. $70,000.

Ont., Sudbury — GRADING, etc. — Liteplane Air Service Co., Inc., c/o Sg. Leader A. U. Houla, Sudbury, grading, drainage, sodding, hardsurfacing two 3,000 ft. landing strips, 60x200 ft. hangar, two 60x60 ft. hangars, 60x110 ft. clubhouse, landscaping. $350,000.

Ont., Toronto—POWER LINE—Ontario Hydro-Electric Comn., University Ave., 5,000 to 10,000 hp. power line serving mining properties in Red Lake Area. **$106,000.**

Quebec — RAILWAY EXTENSION — Canadian Pacific Ry. Co., J. E. Armstrong, ch. engr., Windsor Station, Montreal, exten. railway linking St. Calixte with St. Lin and St. Michel des Saints.

Que., Megantic — HYDRO-ELECTRIC LINES—Megantic Mfg. Co., Ltd., Megantic, plans prepared hydro-electric lines in Spaulding Cantons. $300,000. Z. Langlais, 105 Mountain Hill, Quebec City, engr.

Saskatchewan—GAS PIPELINE—Northern Natural Gas Co. Ltd., Saskatoon, natural gas pipeline from Vermilion to Saskatoon. $100,000.

BIDS ASKED

Bids Asked After February 15

†Tex., Brownsville—INSTRUMENT LANDING SYSTEM—Civil Aeronautics Admin., P. O. Box 1689, Fort Worth, Zone 1, constructing instrument landing sys. Plans deposit $10.

Bids Asked February 19

N. Y., New York—PIER REPAIRS, etc.—Comr. Marine & Aviation, Pier A foot of Battery Pl., North River, Zone 4, repairs and renewals to southeast corner Pier 18 East River, foot of Beekman St., Manhattan Boro, Contr. 2429. Plans deposit $1.50.

Bids Asked February 27

†Ala., Tuscaloosa — GRADING — Veterans Admin., Vermont Ave., between H and I Sts. N.W., Wash. 25, D. C., grading for athletic field, Proj. 2477.

Tex., Houston—TRACKAGE—Harris Co. Navigation Dist., Courthouse, 12,600 lin. ft. standard gage railway trackage, $48,000.

Bids Asked February 28

†Mass., Lawrence—AIRPORT IMPROVEMENTS—Civil Aeronautics Admin., 385 Madison Ave., New York 17, N. Y., clearing, grading, draining paving Municipal Airport. Proposal 1-45-507. To exceed $25,000. CD 2/9—ENR 7/6.

Bids Asked March 2

†Wis., Janesville—LIGHTING—Civil Aeronautics Admin., Transportation Bldg., 608 S. Dearborn St., Chicago 5, Ill., lighting Rock County Airport, Proposal 3-45-393. Plans deposit $10.

Bids Asked March 7

N. J., Ocean City—BATHING BEACH RECLAMATION PROGRAM — City, City Hall, bathing beach reclamation program, Proj. 1-7, $105,000. W. H. Collisson, Jr., City Hall, city engr.

Bids Asked

Louisiana — GAS PIPELINE — Memphis Natural Gas Co., Sterick Bldg., Memphis, Tenn., and Monroe, La., 50 mi. 16 in. natural gas pipeline carrier between Monroe and Lisbon. $250,000. CD 12/6—ENR 12/14, under Louisiana and Tennessee.

LOW BIDDERS

†Ga., Rome—AIRPORT IMPROVEMENTS—Civil Aeronautics Admin., 84 Marietta St. N.W., Atlanta, Jan. 30, airport imprvs., addnl. drain, subdrains, fertilizing, lining, seeding, fencing, lighting, from M. R. Thomason, 121 S. Lewis St., Montgomery, Ala., Sched. 1, **$130,669.** CD 1/2—ENR 1/4.

†Tex., Fort Worth—HANGAR—U. S. Eng., 231 W. Main St., Denison, hangar, Serial 41-242-45-99, Sect. A, from Eckert-Fair Const. Co., 1307 Liberty Bank Bldg., Dallas, **$131,950**; Sect. B, from Texas Bitulithic Co., P. O. Box 5297, Dallas, **$50,210.**

CONTRACTS AWARDED

†Ala., Anniston—SALVAGE YARD, etc.—U. S. Eng., Grant St. west of Westwood St., Mobile, alterations, addns. for salvage yard, incl. outside utilities, Contr. W-01-076-Eng-921, Anniston Ordnance Depot, to Butler & Cobbs, Montgomery, **$43,028.**

Calif., Alameda—TRACK REPAIRS—Alameda Belt Line, 1816 Sherman St., extensive repairs of railroad tracks along Clemont Ave. from Walnut St. to Bway., to A. D. Schader, 144 Spear St., San Francisco. Est. over **$25,000.**

†Calif., Camp Joseph H. Pendleton (br. Oceanside)—AVIATION TRAINING CAMP—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., addnl. facilities for aviation training, Marine Corps Training Station. NOY 10631, to Haddock Engineers, Ltd., P. O. Box 369, Oceanside, **$44,500.** CD 1/15.

Calif., Cardiff—TRACK RELOCATION—The Atchison, Topeka & Santa Fe Ry. Sys., C. W. Harris, ch. engr., 80 E. Jackson Blvd., Chicago 4, Ill., relocating approx. 3,000 lin. ft. track near here, involving removal about 36,000 cu. yd. earth and installing several concrete pipe culverts to A. S. Vinnell Co., 1145 Westminster Ave., Alhambra, over **$25,000.**

†Calif., San Bernardino — HARDSTANDINGS, etc. — U. S. Eng., 751 S. Figueroa St., Los Angeles, Zone 14, gravel hardstandings, appurtenant utilities, San Bernardino Engineer Depot, 1 sub-depot, to G. E. Kerns, 5574 Atlantic Ave., Long Beach, **$78,397.**

†Calif., San Francisco—HOSPITAL CA... TRACKAGE—U. S. Eng., 74 New Mo... gomery St., hospital car trackage, ... W-04-203-Eng-1761, Crissy Field, Pres... of San Francisco, to A. D. Schader, ... Spear St., est. **$59,997.**

D. C., Wash.—PILE FOUNDATION—Di... trict Comrs., District Bldg., concrete pi... fdns. for Parkside School, to J. D. Hoff... Constr. Co., 820 Michigan Ave. N.E., ... Bids 1/16.

†Fla., Key West—PIER, etc.—Yards & ... Docks, Navy Dpt., 18 St. and Constitution ... Ave. N.W., Wash. 25, D. C., new "T"-shape... pier and pier and seawall replacement, ... NOY 11585, to John H. Mann & Son, ... N.W. 17 Ave., P. O. Box 95 ... Station, Miami, Zone 37, **$37,600.**

†Fla., Lake City—LINK TRAINER BLDG.—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., link trainer bldg., Naval Air Station, NO... 11182, to James I. Barnes Constr. Co., P. O. Box 2009, Orlando, **$25,185.**

†Kan., Salina—HANGAR, etc.—U. S. Eng., 10 E. 17 St., Kansas City, Mo., hangar and oil storage bldg. at Smoky Hill Airfield, to M. K. Eby, 311 E. Murdock St., Wichita, **$209,000.** Bids after 1/10. CD 1/10—ENR 1/18.

Louisiana — ELECTRIC TRANSMISSION LINES—Valley Electric Membership Corp., Natchitoches, 49.1 mi. rural electric power transmission lines, Natchitoches Parish, to Delta Constr. Co., Clarksville, approx. **$225,000.** F. Horton & Co., Lamar, Mo., engrs. CD 1/31—ENR 2/1.

†N. M., Kirtland Field (br. Albuquerque)—HANGAR—U. S. Eng., P. O. Box 1538, Albuquerque, hangar, Contr. W-29-005-Eng-309, to K. L. House Constr. Co., 214 E. Marquette St., Albuquerque, est. **$144,051.**

†N. M., Roswell—HANGAR, etc.—U. S. Eng., P. O. Box 1538, Albuquerque, hangar and relocating bldgs., Roswell Army Air field, Contr. W-29-005-Eng-312, to H. A. Parks, Construction Bldg., Dallas, Tex. Est. **$146,784.** CD 1/15—ENR 1/18.

†N. Y., Buffalo—SPRINKLER SYSTEM—U. S. Eng., 20 Wall St., New York, Zone 5, sprinkler sys., to Ryan Plumbing & Heating Co., 156 Stone St., Watertown, **$36,...** Bids 1/3.

†N. C., Cherry Point (br. New Bern)—ELECTRICAL DISTRIBUTION — Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash. 25, D. C., addnl. electrical distr. at Marine Corps Air Station, Spec. 14821, NOY 10411, to Fischbach & Moore, Inc., 1410 H. St. N.W., Wash., D. C., **$372,400.** Bids 1/19. CD 1/30, under LB.

†Tex., Beaumont—RADIO RANGE STATION—Civil Aeronautics Admin., P. O. Box 1689, Fort Worth, Zone 1, ML radio range station, facilities, own forces. **$40,000.** CD 12/5—ENR 12/7.

†Tex., Camp Maxey (br. Paris)—TRAINING AIDS—U. S. Eng., 231 W. Main St., Denison, addnl. training aids, Contr. W-41-242-Eng-406, to H. Newton, Graham. est. **$109,760.**

†Tex., Camp Normoyle (P. O. San Antonio)—SPRINKLER SYSTEM—U. S. Eng., Fort Sam Houston, sprinkler sys., warehouse, Serial No. W-41-154-45-66, to Grinnell Co. Inc., 1315 Marella St., Dallas, **$292,900.** CD 1/22—ENR 1/18.

★ **†Tex., Georgetown** — RUNWAYS, etc.—U. S. Eng., Fort Sam Houston runways, night lighting for airfield, roads, etc., beacon and equipment vault, Serial No. W-41-154-45-58, to Brazos Valley Const. Co., Mineral Wells, **$658,012.** Bids 1/16. CD 1/22—ENR 1/25, under LB.

Tex., Houston — DOCKS — American Liberty Pipe Line Co., Galena Park, rebuilding rein.-con. and wood piling docks, to Nunes Constr. Co., Texas City, approx. **$28,000.** Est. $40,000. CD 1/8—ENR 1/11.

†Virginia—GUARD TOWERS, etc.—U. S. Eng., Fort Norfolk, Norfolk, guard towers, bldgs., appurtenant work, Richmond ASP DEPOT, Chesterfield Co., Contr. W-44-110-Eng-383, to Doyle & Russell, Central Nat'l. Bank Bldg., Richmond, est. **$146,649.**

†Virginia — VENTILATION, etc. — U. S. Eng., Fort Norfolk, Norfolk, ventilation facilities, appurtenant work, at Norfolk Army Base, Norfolk, and Hampton Roads POE, Newport News, Contr. W-44-110-Eng-386, to States Contg. Co., Newport News, **$72,706.**

†Va., Langley Field—STEAM LINE, etc.—U. S. Eng., Fort Norfolk, Norfolk, reconstructing high pressure steam line and appurtenant work, Contr. W-44-110-Eng-384, to Vanguard Const. Corp., 369 Lexington Ave., New York, N. Y., **$30,675.**

†Wash., Seattle—HANGAR DOORS—U. S. Eng., 800 3 Ave., Zone 4, installing hangar doors at Boeing Field, Neg. 1070, to John H. Sellen Constr. Co., 228 9 Ave. N., Zone 9, **$33,105.**

Proposal Advertisements see p. 19

OFFICIAL PROPOSALS

...E: THE RATE FOR OFFICIAL PROPOSAL ADVERTISING IS 50 CENTS PER LINE (OR FRACTION) PER INSERTION
...Y RECEIVED UP TO 10:00 A. M. MONDAY FOR ISSUE OUT THURSDAY SUBJECT TO SPACE OPEN FOR LAST MINUTE ADS
...D COPY TO OFFICIAL PROPOSAL DIVISION, ENGINEERING NEWS-RECORD, 330 W. 42ND ST., NEW YORK 18, N. Y.

...or
...irect contact
...with the
...ost active buyers
...n the
...onstruction market
...ubscribe now to the

...ng.News-Record
...onstruction Daily

This news service at only **$10 per month** puts you in touch with thousands of buyers spending millions of dollars.

Order from
Business News Dept.

ENGINEERING
NEWS-RECORD
330 W. 42 St., New York 18, N. Y.

OFFICIAL PROPOSALS

Bids: Feb. 28 (343)

Bridge Structure

MISSISSIPPI RIVER HIGHWAY BRIDGE AT MEMPHIS, TENNESSEE—CRITTENDEN COUNTY, ARKANSAS MAIN BRIDGE SUBSTRUCTURE PROJECT NO. SN-A-SN-U-FAP 607-A(2), PART 1.

TENNESSEE—ARKANSAS

Sealed duplicate proposals will be received by the Department of Highways and Public Works of Tennessee and the Arkansas State Highway Commission, jointly, at Room 107, Courthouse at Memphis, Tennessee, until 10:00 a. m. Central War Time on February 28, 1945, for the construction of Tennessee-Arkansas Project No. SN-A-SN-U-FAP 607-A(2), Part 1 consisting of the Memphis abutment and the seven main piers of a highway bridge over the Mississippi River, between Memphis, Tennessee, and Crittenden County, Arkansas, and will be publicly opened and read immediately thereafter in the City Council Chamber in the Courthouse, Memphis, Tennessee.

The work to be performed under this contract will consist principally of the construction on the Memphis bank of a stone-faced abutment anchorage and connecting retaining walls, the construction of four pneumatic caisson founded stone-faced main river piers in the navigable section of the river, and the construction of three caisson founded stone-faced piers on the Arkansas bank, all of which support the main superstructure over the Mississippi River, as shown on the contract plans.

Bidders will be required to file with their bids duplicate financial, equipment and experience questionnaire forms made out in detail, which forms will be furnished with bid blanks.

A bidder's bond in duplicate in the amount of $250,000, payable jointly to the Department of Highways and Public Works of Tennessee and the Arkansas State Highway Commission on the forms furnished with the proposal, will be accepted by the States only from a surety or sureties qualified to do business both in Tennessee and Arkansas and holding certificates of authority from the United States Treasury Department and conforming to the limitations of the last published Treasury statement on acceptable sureties.

Plans, specifications and contract documents, together with forms, questionnaires and necessary information, are open to public inspection at the offices of the Department of Highways and Public Works of Tennessee, Nashville, Tennessee, and the Arkansas State Highway Commission, Little Rock, Arkansas, and of Modjeski and Masters, Engineers, State Street Building, Harrisburg, Pennsylvania, and at Room 107, Courthouse, Memphis, Tennessee, and may be secured from Modjeski and Masters, Engineers, State Street Building, Harrisburg, Pennsylvania, upon a deposit of $20.00 per set.

A refund of $10.00 per set will be made by Modjeski and Masters upon the return in good condition to them of the copy so obtained.

The opening of bids is contingent on authorization by the War Production Board of beginning of construction, together with the granting of the preference ratings and

OFFICIAL PROPOSALS

allotments of critical materials for the work. If such authorization is not issued by the time specified for the opening of bids, all proposals will be returned unopened to the respective bidders.

No bid may be withdrawn after having been deposited or filed.

The right is reserved to reject any or all bids and to waive all technicalities.

DEPARTMENT OF HIGHWAYS AND PUBLIC WORKS OF TENNESSEE
C. W. PHILLIPS, Commissioner.
ARKANSAS STATE HIGHWAY COMMISSION
J. H. CRAIN, Chairman.

Bids: March 1 (354)

General Construction

WAR PUBLIC WORKS PROJECT
PA. 36-202

Separate sealed bids for

CONTRACT 1: General construction, including Heating, Plumbing, and Electric Work.

For Mercy Hospital Nurses' Home will be received by the Mercy Hospital and School for Nurses of Philadelphia, at the Office of the Director,

John H. Graves, M. D.
Mercy Hospital
5000 Woodland Avenue
Philadelphia, Pa.

until 10:00 o'clock A. M., E.W.T., first day of March 1945, and then at said office will be opened publicly and read aloud.

The Information for Bidders, Form of Bid, Form of Contract, Plans, Specifications and Forms of Bid Bond and Performance Bonds may be examined and copies thereof obtained at the office of Hilyard R. Robinson, Architect, 1927-11th St., N.W. Washington 1, D. C., and copies thereof obtained upon payment of $15.00 for each set. Any bidder, upon returning such set promptly and in good condition, will be refunded his payment, and any non-bidder upon so returning such a set will be refunded $10.00.

The Mercy Hospital and School for Nurses of Philadelphia reserves the right to waive any informalities in or to reject any or all bids.

Each bidder must deposit with his bid security in the amount of 5% of bid in the form and subject to the conditions provided in the Information for Bidders.

Attention of bidders is particularly called to the requirments as to conditions of employment to be observed and the applicable minimum hourly wage rates.

MERCY HOSPITAL
AND SCHOOL FOR NURSES
OF PHILADELPHIA
By John H. Graves,
Director.

EMPLOYMENT ADVERTISING
See following page

EMPLOYMENT OPPORTUNITIES

RATE: 10 CENTS A WORD, MINIMUM CHARGE $2.00

Positions Wanted (full or part time individual salaried employment only), ½ the above rates, payable in advance.

Box Numbers in care of any of our New York, Chicago or San Francisco offices count 10 words additional in undisplayed ads.

Discount of 10% if one payment is made in advance for four consecutive insertions of ordinary ads (not including proposals.)

Copy for new advertisements received until 10 A. M. Friday for following Thursday's Issue

POSITIONS VACANT

FIRE PROTECTION Engineers and inspectors. Technical graduates, especially chemical and electrical; civil, mechanical, metallurgical also considered. Inspect and consult industrial plants to prevent fires, explosions, and other casualties. Considerable travel and report writing; interesting work offering permanency. Engineering experience necessary. Salary open. Well-known national organization with openings at Cleveland, Chicago, and other district centers. Men under 30 years of age cannot be considered. Please send a photograph when applying. P-985, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

WANTED SHOP labor estimator for riveted and welded work in structural steel fabricating shop. Wisconsin Bridge & Iron Company, Milwaukee 9, Wisconsin.

DESIGNER, ESTIMATOR and draftsman — shop fabricating structural and ornamental iron work, located in Norfolk, Va. Permanent job to right man. Give full details in first letter. P-103, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

WANTED: MECHANICAL, heating and ventilating and electrical engineer on design and supervision of construction of large machine shop in Texas. Also miscellaneous designers and draftsmen. This is a war job. Gannett Fleming Corddry & Carpenter, Inc., Box 366, Harrisburg, Penna.

STRUCTURAL ENGINEER with at least five years experience in design and construction of railway bridges and buildings, including continuous and rigid frame construction for office and field work in Michigan and Ohio. Give full details, education, experience, salary desired and availability. P-126, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

WANTED

CONSTRUCTION SUPERINTENDENT

Large manufacturer needs Construction Superintendent for erection of reinforced concrete plant and installation of process equipment in Mexico. Must be capable of dealing with sub-contractors. Single man with knowledge of Spanish preferred. Healthy location. Good future prospects. Salary open.

P-117, Engineering News-Record
330 W. 42nd St., New York 18, N. Y.

POSITIONS VACANT

WANTED—Three structural steel designers and seven reinforced concrete designers for highway bridges, also, several draftsmen for highway and bridge work. State age, experience, education, and full details and when available. Apply Etate Highway Engineer, Department of Highways and Public Works, Nashville 3, Tennessee.

WANTED: MARINE or Mechanical Engineer having administrative ability. Age 30 to 45 years. Experienced in lay out and design of mechanical units and piping systems for marine installations. Definite post-war opportunity with a long established firm building a diversified line of floating and material handling equipment. Write and give complete information concerning experience, age, present earnings and salary expected to P-120, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ENGINEERS. For work in Boston, Massachusetts, Engineering designers, and draftsmen, mechanical, electrical, and structural. Certificate of availability essential. P-121, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

TECHNICAL GRADUATE. Preferably in construction engineering. War veteran preferred. Slight physical handicap no objection. A man who would be interested in developing himself along technical and selling lines with private industry and government agencies, both now and after the war. The work would consist largely of technical service to contractors, municipalities and to the government. Preferably age 30 to 35. Salary commensurate with ability. Reply in first letter giving full particulars of education, branch of service, length of service. Position involves requirements of highest order and will be of a permanent nature with ample opportunity for advancement both in opportunity and salary. P-125, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CIVIL ENGINEER. Graduate preferred, to act as resident construction engineer. Location middlewest. Salary thirty-three hundred. Vacation, sick leave. P-122, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

WANTED NOW

STRUCTURAL DESIGNERS

AND

DRAFTSMEN

FOR THE NAVY'S LARGEST AND MOST URGENT PROJECT

NAVAL ORDNANCE PLANT
CAMDEN, ARKANSAS

ROCKET PROGRAM

DORMITORY DOUBLE ROOMS AND CAFETERIA AVAILABLE ON PROJECT

If you are now employed in an essential activity at highest skill, do not apply.

War manpower availability and Selective Service Board clearance required.

"ROCKETS WILL SAVE LIVES"

SEND EXPERIENCE RECORD TO

FRASER-BRACE ENGINEERING CO., INC.
CAMDEN, ARKANSAS

POSITIONS VACANT

STRUCTURAL ENGINEER. Steel, concrete, wood. South Texas. Work probably [illegible] tion Pacific War. $360. month. P-124, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

POSITIONS WANTED

GRADUATE C.E. willing to take long term contract for responsible position in Europe or Near East after the war. Foreign experience. Languages. PW-979, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

EXECUTIVE 39 will capably take charge of purchasing, maintenance and operation of truck fleet. Fifteen years exceptional administrative record with largest company of its kind. Prefer sound medium-sized organization seeking overall betterment in hauling operations. PW-992, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

CONTRACTOR'S ESTIMATOR — Technical education, 25 years experience in responsible positions, qualified to assume complete responsibility for estimating, engineering, letting subcontracts and office management. Nation-wide experience on building, industrial housing, reinforced concrete, masonry, railroad, water and sewage treatment, and Army & Navy, construction. Location immaterial. Estimator, Apartment 210, 4 East 32nd St., Baltimore 18, Md.

CONTRACTORS RIGHT Hand man, 45, graduate engineer, many years successful experience as construction superintendent on big difficult work and general administration desires connection with first class contractor actively engaged heavy construction, waterfront work, bridges, steel and concrete structures. Familiar with all business and operational details, good organizer, know costs and equipment and well recommended. PW-963, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

GENERAL CONSTRUCTION—Civil Engineer, project manager, estimator. Rensselaer graduate, age 39, 16 years experience field and office. Desire permanent connection with general contractor. PW-976, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CIVIL ENGINEER — Registered. Age 38. Experienced in supervision of design, layout construction and field engineering; land work. Desires responsible position. Available immediately. PW-975, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

CONSTRUCTION SUPERINTENDENT, 20 years experience. Public-commercial-industrial buildings, Housing, Oil refinery construction. Available February 15th. Location immaterial. PW-981, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

SUPERINTENDENT: CAPABLE estimator, contact man. Age 38. Over 15 years experience full charge of bridges, piers, dams, difficult foundations, railroad, heavy steel and waterfront work, marine construction and salvage. Energetic, good organizer, personality and character excellent. Go anywhere. Prefer salary and bonus with rising contractor who offers future to a good builder-upper. PW-120, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CIVIL ENGINEER. Registered graduate with twenty years experience including building construction estimating, highway and airfield planning, preparing specifications and technical reports. Will accept responsible position offering permanency. Midwest location. PW-119, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

CONTRACTORS EXECUTIVE: Structural engineer, 10 years experience (none cost-plus) estimating, purchasing, managing building construction. Sewage disposal plants. Water treatment plants. Excellent structural draftsman. Reinforced concrete design and reinforcing bar detailing a specialty. P. O. Box 4783, Jacksonville, Florida.

CONTRACTORS ENGINEER, graduate, 20 years wide experience building and general construction, including negotiating, purchasing, estimating. Salary $100 per week. PW-121, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

THE WORLD WITH RAYMOND

FOR ALMOST [illegible] the Raymond Company has completed more than 11,000 contracts in Central and South America and many foreign lands. These activities have been so widely diversified as to include jetties, foundations, harbor and river improvements, tunnels, dams, highways, community development, housing and industrial projects.

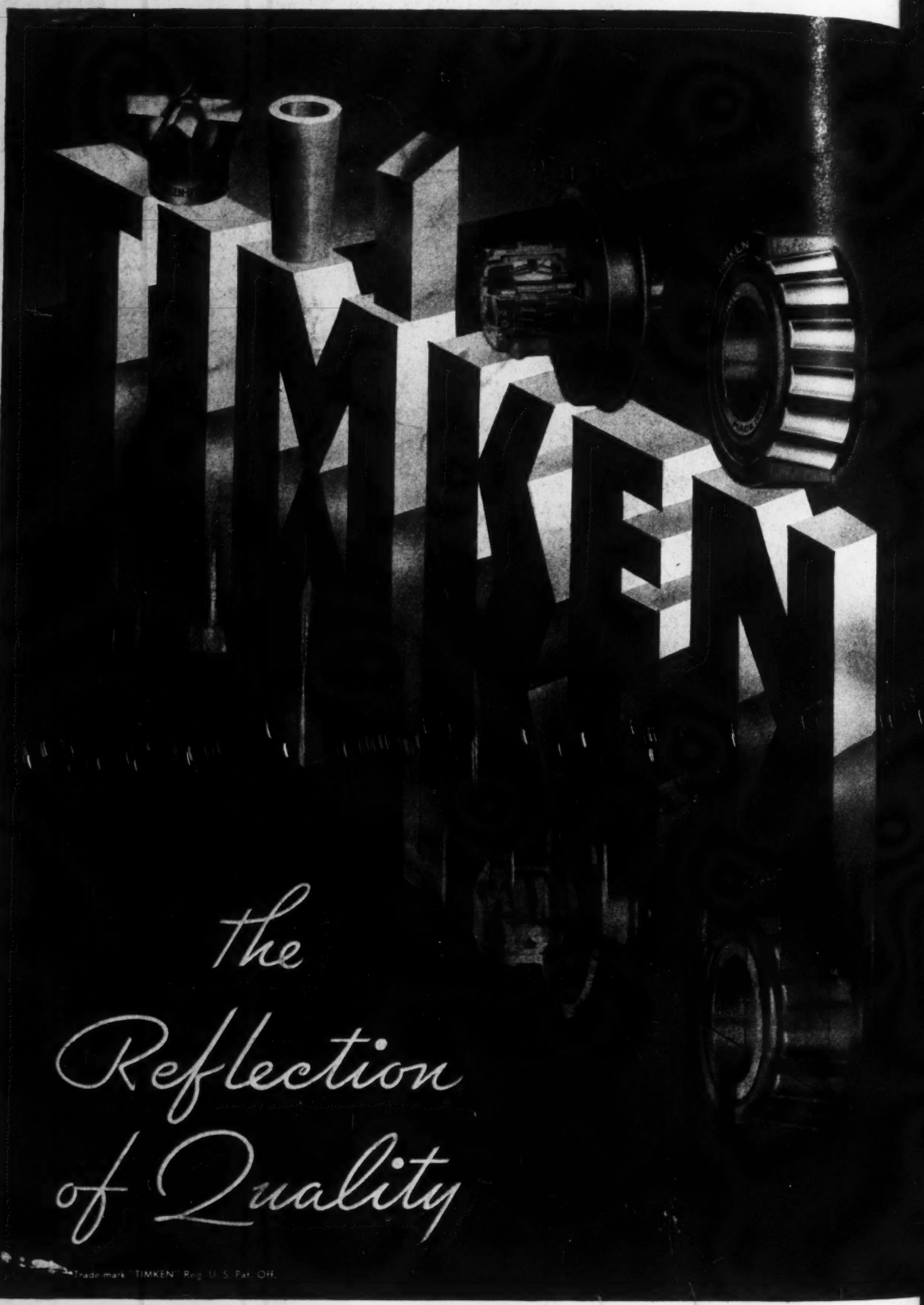
As a result of this world-wide experience a highly trained personnel has been developed—the men who handle this particular range of Raymond service possess a comprehensive knowledge of foreign languages and native customs and are thoroughly familiar with working conditions in many countries. The sum total of Raymond experience—wisdom is yours to command. Inquiries will receive prompt and careful attention.

RAYMOND
CONCRETE PILE COMPANY

BRANCH OFFICES IN PRINCIPAL CITIES

140 CEDAR STREET • NEW YORK 6, N. Y.

PE OF RAYMOND'S ACTIVITIES includes every recognized type of pile foundation—concrete, composite, precast, steel, pipe and wood. Also ions, construction involving shore protection, ship building facilities, harbor and river improvements and borings for soil investigation.



TIMKEN Tapered Roller Bearings | **TIMKEN** Alloy Steels | **TIMKEN** Seamless Steel Tubing | **TIMKEN** Railway Roller Bearings | **TIMKEN** Rock Bits